FW_ FHP technical briefing deck QA-election.pdf

From:	Lightbody, Ava (ENERGY)
To:	Rehob, James (ENERGY); Huang, Jackson (MEDG/MRIS)
Cc:	Thouin, Alena (ENERGY)
Subject:	FW: FHP technical briefing deck QA-election
Date:	February 2, 2018 12:05:11 PM
Attachments:	QA - OPG OFHP Debt FinancingTech Briefing - AH - 20180201 - MO-EPE-LSB.docx
Importance:	High

Hello,

Further to our previous emails, attached is the full set of QAs – we would appreciate your review of the rest of the new MO questions (all tracked) as well as alterations to the post-election question (consolidated in this document).

Thanks again,
Ava

From: Lightbody, Ava (ENERGY)
Sent: February-02-18 11:35 AM
To: Rehob, James (ENERGY)
Cc: Huang, Jackson (MEDG/MRIS)
Subject: RE: FHP technical briefing deck QA-election

Much obliged.

From: Rehob, James (ENERGY)
Sent: February-02-18 11:14 AM
To: Lightbody, Ava (ENERGY)
Cc: Thouin, Alena (ENERGY); Huang, Jackson (MEDG/MRIS)
Subject: FHP technical briefing deck QA-election

Hi, Ava. Jackson and I have provided some edits/revisions for your consideration.

Best,

James and Jackson
James P. H. Rehob
Senior Counsel
Ministry of the Attorney General
Legal Services Branch
MAG Civil Law Division
Ministry of Energy, Ministry of Economic Development and Growth, Ministry of Research, Innovation and Science, Ministry of Infrastructure, Accessibility Directorate of Ontario
56 Wellesley Street West
Toronto, ON M7A 2E7
Tel: 416-325-6676
Fax: 416-325-1781
james.rehob@ontario.ca

QA - OPG OFHP Debt FinancingTech Briefing - A.pdf

Q&A: OPG OFHP Tech Briefing
Ministry of Energy
Key Messages/Questions and Answers
Date: January 25, 2018
Last Reviewed by: ESP

KEY MESSAGES:

- **Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history.**
- **OFHP has lowered electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. The plan includes the 8 per cent rebate introduced in January 2017 and builds on previously announced initiatives to deliver broad-based rate relief on all electricity bills. As many as half a million small businesses and farms are also benefitting from a reduction.**
- **Ontario Power Generation (OPG) has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than original estimates.**
- **Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[1]. The preliminary estimate from March 2017 was about $28 billion[2].**
- **OPG has developed solid investor relationships and has a large investor base in the structured finance space that ~~would be~~is the target market for financing Ontario's Fair Hydro Plan initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors[3], including major investors in the Canadian power and utility bonds market.**
- **Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.**
- **The senior officials and staff were from:**
  - **Ministry of Energy;**
  - **Ministry of Finance;**
  - **Treasury Board Secretariat;**
  - **Office of the Provincial Controller;**
  - **Cabinet Office;**

Commented [NC(1]: This should be in KMs

Commented [NC(2]: This should be in KMs

---

[1] Ministry of Energy
[2] Ministry of Energy, submission to Financial Accountability Officer
[3] Ontario Power Generation

- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

Commented [NC(3]: Add to KMs

- **~~Ontario Power Generation (OPG)~~OPG has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).**
- **OPG currently manages approximately $20 billion[4] in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts**
- **OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments.**
- **The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.**

[4] Ontario Financing Authority

Qs and As

Q. Why did the government introduce the Ontario Fair Hydro Plan?

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly $70 billion[5] has been invested in the electricity system, including more than $37[6] billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP lowered electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

In developing the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. What is Global Adjustment (GA)?

Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also recovers costs associated with running conservation programs in the province.

GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a reliable supply of electricity.

GA pays for the bulk of the recent investments in the electricity system. The majority of the province's electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that generating assets are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets.

[5] Ministry of Energy, *2017 Long-Term Energy Plan*
[6] Ministry of Energy, *2017 Long-Term Energy Plan*

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Q. Has the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? How much is the program expected to cost?

Ontario Power Generation (OPG) has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than original estimates.

Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[7]. The preliminary estimate from March 2017 was about $28 billion[8].

Commented [NC(4]: This should be in KMs

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty-year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[9] to approximately $20 billion[10]. These estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro Plan? Would it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?

Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).

OPG currently manages approximately $20 billion[11] in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.

OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

OPG has developed solid investor relationships and has a large investor base in the structured finance space that would be the target market for financing Ontario's Fair Hydro Plan initiative. For

[7] Ministry of Energy
[8] Ministry of Energy, submission to Financial Accountability Officer
[9] Ministry of Energy
[10] Ministry of Energy
[11] Ontario Financing Authority

example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors[12], including major investors in the Canadian power and utility bonds market.

Commented [NC(5]: This should be in KMs

In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than $2 billion[13] and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

Q. How much was spent by OPG to complete this transaction? Will these costs be borne by ratepayers?

Commented [HA(6]: Unfortunately have nothing that can speak to the first part of this question.

~~The government is dedicated to reducing electricity costs wherever possible, while maintaining reliability for all consumers.~~

~~With Ontario's Fair Hydro Plan and as a result of the government's prudent fiscal management, the Ontario government is delivering on its commitment to balance the budget this year, recognizing that balance provides the foundation for the long-term well-being and prosperity of Ontarians.~~

~~To relieve the current burden on ratepayers and share costs more fairly, a portion of the GA is being refinanced. Refinancing the Global Adjustment (GA) will provide significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built.~~

~~In the early years, it is intended that a portion of the costs covered by the GA will be refinanced to reduce pressure on today's electricity ratepayers. In later years, the cost of refinancing will be recovered from ratepayers.~~OPG was identified as the Financial Services Manager responsible for producing the financing plans and for the financing entity (i.e., Fair Hydro Plan Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

Under the *Ontario Fair Hydro Plan Act, 2017* and associated regulations, OPG is permitted to charge fees as financial services manager, which allow OPG to recover costs incurred in relation to the establishment, management and administration of the financing entity and the investment asset.

In accordance with regulations made under the Act, financial services manager fees are recovered from IESO, and recorded in the IESO variance account to form part of the regulatory asset. In accordance with the structure of Ontario's Fair Hydro Plan, in future years these amounts will be recovered from ratepayers.

Ontario's Fair Hydro Plan is designed to fairly allocate costs across the generations of electricity ratepayers. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system.

Further questions on OPG costs should be directed to OPG.

[12] Ontario Power Generation
[13] Ontario Power Generation

Q. Some say you are unfairly placing the burden of debt on future generations through things like Ontario's Fair Hydro Plan, how do you respond?

Future generations will be paying their fair share for a system they will be benefiting from in their lifetime. Not only will they benefit from a reliable electricity system, but also from cleaner air resulting from the elimination of coal-fired generation.

Ontario's Fair Hydro Plan (OFHP) acts much like taking out a new mortgage – providing much-needed relief now by spreading costs across the life of our assets. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Moving forward, Ontario's 2017 Long-Term Energy Plan (2017 LTEP) focuses on continuing to put downward pressure on electricity bills over the long term. Our robust electricity supply puts us in a good position to improve efficiency, increase transparency and enhance opportunities for innovation and competition to further reduce system costs. That is why Ontario's Fair Hydro Plan includes a commitment to improving sector efficiency and modernizing Ontario's electricity market, building on the collaboration of the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).

For example, IESO's Market Renewal initiative will result in a more efficient marketplace with competitive and transparent mechanisms that meet future system needs at the lowest cost. The initiative is expected to save up to $5.2 billion[14] over a 10-year period and forms a key component of Ontario's plan to ensure the affordability of electricity in the longer term.

Q. When will the next tranche of debt be sold?

OPG was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro Plan Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

OPG is expected to purchase the IESO deferral monthly, and to issue longer term debt in the capital markets on a periodic basis.

~~The *Fair Hydro Act, 2017* enables the Independent Electricity System Operator (IESO) and Ontario Power Generation (OPG) to work together to spread out the costs of Ontario's clean energy investments over a longer period of time, which ensures that the costs of these investments are allocated fairly among current and future ratepayers. This will be accomplished through refinancing a portion of the Global Adjustment (GA), resulting in significant and immediate rate reductions.~~

~~Under the legislation, OPG has developed a financing plan, which sets out the funding obligations and amounts related to the financing of the deferred GA amounts. The Ontario Energy Board (OEB) will continue its role as regulator for the electricity sector. In particular, it will continue to set commodity~~

[14] Independent Electricity System Operator, *Assessment of the Benefits of Market Renewal (Brattle Group)*

~~rates for Regulated Price Plan (RPP) consumers, including cost reductions under the *Fair Hydro Act, 2017*. Debt and financing costs will be recovered through adjustments to consumer bills.~~

~~Borrowing is expected to be done in tranches, as set out in the Financing Plan developed by OPG.~~

Q. There is an election in 17 weeks. Can the Ontario Fair Hydro Plan be undone? What will that mean for the refinancing of the GA and Ontario ratepayers?

~~The~~ Ontario's Fair Hydro Plan is a function of both legislation and finance, ~~has been developed~~ and its implementation ~~has begun and~~ is ongoing. ~~The Fair Hydro Plan (~~GA Refinancing~~)~~ is implemented through ongoing financings that OPG, as the Financial Services Manager, takes to market. ~~Through the Ontario Fair Hydro Plan Act, 2017, each financing is final once the financing has been completed, and cannot be undone until fully repaid. cannot be undone~~.

The *Ontario Fair Hydro Plan Act, 2017* and associated regulations provide the legislative framework for the GA refinancing program and its policy goals, allowing certain electricity system costs to be to fairly allocated across generations of electricity ratepayers. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system.

In accordance with the legislation and associated regulations, Ontario's Fair Hydro Plan ~~is lowering rates~~has lowered electricity bills by 25 per cent on average across the province for ~~all~~ residential customers. As many as half a million small businesses and farms are also benefitting. Increases will be held to the rate of inflation for four years.

~~Under GA refinancing, initial analysis indicates that borrowing would occur for about 10 years. Initial analysis indicates that it is currently anticipated that loans will begin to be paid back in the mid-to-late 2020s. The exact timing will be determined by the markets and other factors as we strive to balance costs and benefits in the fairest way possible. This is a significant change that represents a fair solution to an issue that has unfairly burdened current electricity ratepayers. This does not sacrifice investments in the energy system. We're changing the way electricity costs are recovered, and moving funding for certain social programs off of hydro bills. This plan is delivering the biggest rate reduction in Ontario's history.~~

~~The Ontario Fair Hydro Plan cannot be undone.~~

~~Ontario's Fair Hydro Plan is lowering rates by 25 per cent on average across the province for all residential customers. As many as half a million small businesses and farms are also benefitting. Increases will be held to the rate of inflation for four years.~~

~~Under GA refinancing, initial analysis indicates that borrowing would occur for about 10 years. Initial analysis indicates that it is currently anticipated that loans will begin to be paid back in the mid-to-late 2020s. The exact timing will be determined by the markets and other factors as we strive to balance costs and benefits in the fairest way possible. This is a significant change that represents a fair solution to an issue that has unfairly burdened current electricity ratepayers. This does not sacrifice investments in the energy system. We're changing the way electricity costs are recovered, and moving funding for social programs off of hydro bills. This plan is delivering the biggest rate reduction in Ontario's history.~~

Q. Who was involved in the policy and implementation process to meet the mandate?

Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.

The senior officials and staff were from:
- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

Commented [NC(7]: Add to KMs

In development and implementation of Global Adjustment (GA) refinancing, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

Auditor General and Financial Accountability Office reports

Q. The Auditor General and the Financial Accountability Office both suggest that the cost of borrowing will be more expensive than traditional government borrowing? Is this true?

In the development of Ontario's Fair Hydro Plan (OFHP), the government made the policy decision that deferred electricity system costs should be borne by the rate-base and not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible consumers.

Ontario Power Generation (OPG) was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro Plan Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner.

OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

With respect to the $4 billion[15] figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Commented [NC(8]: Will we know what the new $4 billion number will be on February 9?

Commented [AL9]: The Ministry doesn't have an equivalent number to the FAO's $4 billion and doesn't currently expect to calculate one. Numbers regarding the forecasted cost of the program (debt and interest) will continue to be updated.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast

[15] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[16]. The preliminary estimate from March 2017 was about $28 billion[17].

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[18] to approximately $20 billion[19]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manage (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 billion[20] to less than $19 billion[21].

Q. Has the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? I understand that the Office of the Audit General (OAG) has asked what are the factors that resulted in the changes in estimates from March 1 to August 31?

With respect to the $4 billion[22] figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[23]. The preliminary estimate from March 2017 was about $28 billion[24].

[16] Ministry of Energy
[17] Ministry of Energy, submission to Financial Accountability Officer
[18] Ministry of Energy
[19] Ministry of Energy
[20] Ministry of Energy
[21] Ministry of Energy
[22] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*
[23] Ministry of Energy
[24] Ministry of Energy, submission to Financial Accountability Officer

The revised estimates are the result of a number of factors, including updated long-term cost projections for the electricity system and residential bills provided by the Independent Electricity System Operator (IESO).

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[25] to approximately $20 billion[26]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manage (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 billion[27] to less than $19 billion[28].

Commented [NC(10]: I'm a little unclear on the difference between interest cost and peak debt?

Commented [AL11]: Peak debt represents the peak of accumulated principle and interest, which is forecasted to occur in the later 2020s. These interest figures represent the forecasted total amount of interest that will be payable over the life of the program.

Q. In the development of Ontario's Fair Hydro Plan, did the government set up the financing structure intentionally to keep it off government books?

No. GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

GA refinancing operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. How do you respond to the Financial Accountability Office's (FAO) suggestion from May 2017 that using Ontario Power Generation as the borrowing agent will cost $4 billion more? Why not have the Province borrow for the OFHP?

The policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets. Therefore, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base.

We believe it is appropriate for ratepayers to pay for the financing of electricity assets. The rate-base has a different risk profile than the tax-base, which would be reflected in different interest costs.

[25] Ministry of Energy
[26] Ministry of Energy

Having the rate-base pay is not a new policy, for example Hydro One has borrowed in the capital markets since the early 2000s[29].

The $4 billion figure was an estimate made by the Financial Accountability Office (FAO) based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[30]. The preliminary estimate from March 2017 was about $28 billion[31].

The FAO report itself concludes by saying "the FAO's estimates are subject to many assumptions and uncertainties (…) Fiscal impact may differ significantly from the FAO's estimates."

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[32]to approximately $20 billion[33]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 billion[34] to less than $19 billion[35].

Q. Do you disagree with the FAO on financial costs?

With respect to the $4 billion[36] figure referenced by the Financial Accountability Office (FAO) in its May 2017, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty-year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak

---

[29] Ministry of Finance
[30] Ministry of Energy
[31] Ministry of Energy, submission to Financial Accountability Officer
[32] Ministry of Energy
[33] Ministry of Energy

[36] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

debt over the thirty year life of OFHP will be approximately $20 billion[37]. The preliminary estimate from March 2017 was about $28 billion[38].

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[39] to approximately $20 billion[40]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The Ministry estimates of total interest cost also decreased from $25 billion[41] to less than $19 billion[42].

Reasoning for Accounting Approach

Q. How do you respond to the Auditor General's claim that the government ignored warnings regarding a potential adverse audit opinion of Ontario's public accounts?

The government's financial statements are prepared in accordance with Public Sector Accounting Standards (PSAS), and will continue to follow these standards for the transactions resulting from Ontario's Fair Hydro Plan (OFHP) in 2017-18 and in future years.

In regards to rate-regulated accounting, PSAS are silent on the use of regulated accounting:

- PSAS acknowledges that it does not provide guidance on all possible transactions and notes that it is necessary to refer to other sources of guidance that are consistent with the PSAS framework; and
- US GAAP, with the most developed guidance on rate-regulated accounting, is the appropriate guidance to reference.

Many entities in Canada, including OPG and Hydro One use rate-regulated accounting:

- The OAG can refer to the CPA Canada research study that was shared.

[37] Ministry of Energy
[38] Ministry of Energy, submission to Financial Accountability Officer
[39] Ministry of Energy
[40] Ministry of Energy

- Rate-regulated accounting is well understood in the electricity sector.
- The recognition of regulatory assets brings IESO in line with 6 other independent system operators in North America, including AESO, ISO New England, NYISO, MISO, PJM and ERCOT.

The IESO management, IESO's Audit Committee, IESO's Board of Directors, IESO's external auditor and the Office of the Provincial Controller all support the use of rate-regulated accounting by IESO.

In the development of OFHP, the government consulted with several third party advisors in the application of accounting standards. This is normal course of business governments take for complex transactions.

FW_ For Review - OPG OFHP Tech Briefing QA(1).pdf

From:	Lightbody, Ava (ENERGY)
To:	Christie, Tim (ENERGY)
Cc:	Cayley, Daniel (ENERGY); Pinheiro, Alex (ENERGY)
Subject:	FW: For Review - OPG OFHP Tech Briefing QA
Date:	January 24, 2018 4:10:39 PM
Attachments:	QA - OPG OFHP Debt FinancingTech Briefing - AH - 20180122 KMs added - v2.docx

Hi Tim,

OPG tech briefing QAs for your review (almost identical to AG QAs):
\\Etcptovspifs003\pd\EnergyPolicy\Economics\Comms\Requests\20180123 FHP technical briefing QAs\QA - OPG OFHP Debt FinancingTech Briefing - AH - 20180122 KMs added - v2.docx

Ava

From: Thiru, Dhil (ENERGY)
Sent: January-17-18 11:32 AM
To: Cayley, Daniel (ENERGY)
Cc: Christie, Tim (ENERGY); DeSouza, Avril (ENERGY); Lightbody, Ava (ENERGY); Pinheiro, Alex (ENERGY)
Subject: FW: For Review - OPG OFHP Tech Briefing QA

Hi Daniel,

Attached is a QA for the Minister's upcoming OPG OFHP Technical briefing. DMO has shared this note with ESP only so kindly let me know if you believe other divisions would need to be involved. Kindly return to me by EOD Wednesday January 24.

Thanks.

From: Hendy, Adam (ENERGY)
Sent: January-17-18 11:04 AM
To: Thiru, Dhil (ENERGY)
Cc: Cox, Hilary (ENERGY); @ENERGY-COMM-Issues_and_MediaRelations; Berg, Denna (ENERGY); Lyon, Sam (ENERGY)
Subject: For Review - OPG OFHP Tech Briefing QA

Hey Dhil,

Attached for review is a QA we have put together for the Minister's use at the upcoming OPG OFHP Technical Briefing. This is simply a refresh/updated version of the QA we used for the October tech briefing on the OAG's special report on the OFHP.

In the doc you will notice tracked X's as placeholders, these are in place of dollar figures that are likely to change when we know OPG's interest rate. Please feel free to change any numbers in the doc where appropriate.

Hoping we can get this back by Jan 25 at noon, or whenever the numbers become available to you.

Thanks,
Adam

QA - OPG OFHP Debt FinancingTech Briefing - A_1.pdf

CONFIDENTIAL

Jan 22, 2017

KEY MESSAGES

- **Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history.**
- **OFHP has ~~introduced new measures to lower~~lowered electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.**
- **Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).**
- **OPG currently manages approximately $20 billion[1] in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts**
- **OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization program and highly successful project debt issuances tied to new hydroelectric developments.**
- **Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government ~~since the FAO released its report in May 2017~~, and borrowing costs are now forecast to be substantially lower than original estimates.**
- **The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.**

Commented [AL1]: Suggest removing since may not need to raise the reports as a km in this context

[1] Ontario Financing Authority

Q&As – OFHP Debt Financing

Q. Why did the government introduce the Ontario Fair Hydro Plan?

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly $70 billion[2] has been invested in the electricity system, including more than $37[3] billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP ~~has introduced new measures to~~ lowered electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

In developing the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. What is the Global Adjustment (GA)?

The Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. The GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also accounts for costs associated with running conservation programs in the province.

GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a reliable supply of electricity.

GA pays for the bulk of the recent investments in the electricity system. The majority of the province's electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that generating assets are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

---

[2] Ministry of Energy, *2017 Long-Term Energy Plan*
[3] Ministry of Energy, *2017 Long-Term Energy Plan*

Q. Has the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? How much is the program expected to cost?

Ontario Power Generation (OPG) has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than original estimates.

Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[4]. The preliminary estimate from March 2017 was about $28 billion[5].

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions. The total estimated cost of the program has already been revised downwards substantially to reflect revised inputs.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $27.7X billion[6] to approximately $20 billion[7]. These estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as FSM and assume a 5% interest rate.

Commented [AL2]: Rather than reject comms tracked changes, I've tracked my own additions for process visibility

Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro ~~Act~~Plan? Would it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?

Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).

OPG currently manages approximately $20 billion[8] in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.

OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization program and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

OPG has developed solid investor relationships and has a large investor base in the structured finance space that would be the target market for financing Ontario's Fair Hydro Plan initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors[9], including major investors in the Canadian power and utility bonds market.

[4] Ministry of Energy
[5] Ministry of Energy, submission to Financial Accountability Officer
[6] Ministry of Energy
[7] Ministry of Energy
[8] Ontario Financing Authority
[9] Ontario Power Generation

In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than $2 billion[10] and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

Q. Some say you are unfairly placing the burden of debt on future generations through things like Ontario's Fair Hydro Plan, how do you respond?

Future generations will be paying their fair share for a system they will be benefiting from in their lifetime. Not only will they benefit from a reliable electricity system, but from the cleaner air from the reduction of coal-fired generation.

Ontario's Fair Hydro Plan (OFHP) acts much like taking out a new mortgage – providing much-needed relief now by spreading costs across the life of our assets. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Moving forward, Ontario's 2017 Long-Term Energy Plan (2017 LTEP) focuses on continuing to put downward pressure on electricity bills over the long term. Our robust electricity supply puts us in a good position to improve efficiency, increase transparency and enhance opportunities for innovation and competition to further reduce system costs. That is why Ontario's Fair Hydro Plan includes a commitment to improving sector efficiency and modernizing Ontario's electricity market, building on the collaboration of the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).

For example, IESO's Market Renewal initiative will result in a more efficient marketplace with competitive and transparent mechanisms that meet future system needs at the lowest cost. The initiative is expected to save up to $5.2 billion[11] over a 10-year period and forms a key component of Ontario's plan to ensure the affordability of electricity in the longer term.

Q. Who was involved in the policy and implementation process to meet the mandate?

Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.

The senior officials and staff were from:
- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

[10] Ontario Power Generation
[11] Independent Electricity System Operator, *Assessment of the Benefits of Market Renewal (Brattle Group)*

In development and implementation of Global Adjustment (GA) refinancing, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

Auditor General and Financial Accountability Office reports

Q. The Auditor General and the Financial Accountability Office both suggest that the cost of borrowing will be more expensive than traditional government borrowing? Is this true?

In the development of Ontario's Fair Hydro Plan (OFHP), the government made the policy decision that deferred electricity system costs should be borne by the rate-base and not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible consumers.

Ontario Power Generation (OPG) was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro Plan Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner.

OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization program and highly successful project debt issuances tied to new hydroelectric developments. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

With respect to the $4 billion[12] figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be ~~below~~ approximately $~~20~~ 20~~X~~ billion[13]. The preliminary estimate from March 2017 was about $28 billion[14].

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions. The total estimated cost of the program has already been revised downwards substantially to reflect revised inputs.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

---

12 Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

13 Ministry of Energy

14 Ministry of Energy, submission to Financial Accountability Officer

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $27.7~~27.7~~X billion[15] to approximately ~~-~~$~~18.5X~~20 billion[16]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as FSM and assume a 5% interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 ~~25 X~~billion[17] to less than $19~~18~~ ~~X~~ billion[18].

Q. Has~~ve~~ the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? I understand that the Office of the Audit General (OAG) has asked what are the factors that resulted in the changes in estimates from March 1 to August 31?

With respect to the $4 billion[19] figure referenced by the Financial Accountability Office (FAO) in its May 2017, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be ~~below~~ approximately $20~~20 x~~ billion[20]. The preliminary estimate from March 2017 was about $28 billion[21].

The revised estimates are the result of ~~the following~~a number of factors, including updated long-term cost projections for the electricity system and residential bills provided by the Independent Electricity System Operator (IESO).~~:~~

- ~~The Independent Electricity System Operator (IESO)~~ updated its long-term cost projections ~~for the electricity system and residential bills~~;
- ~~The Ontario Energy Board (OEB) provided "actual data" with respect to residential bills for the May 1, 2017 to April 30, 2018 period; and~~
-
- ~~Based on expert third-party advice the interest rate assumptions for OFHP were updated (i.e., from 5%[22] down to 4.5%[23]).~~

Commented [AL3]: This bullet and the below bullet regarding the "August 31, 2017" don't seem that helpful but it's possible I am misunderstanding and am happy to discuss/keep them in.

Commented [AL4]: This bullet removed in accordance with the model we are using (to align with FAA letter)

---

[15] Ministry of Energy
[16] Ministry of Energy
[17] Ministry of Energy
[18] Ministry of Energy
[19] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*
[20] Ministry of Energy
[21] Ministry of Energy, submission to Financial Accountability Officer
~~[22] Ministry of Energy~~
~~[23] Navigant Consulting, *Assessment of the Alignment of the Costs and Benefits of Clean Energy Assets*~~

~~In addition, for the August 31, 2017 estimate, the Ministry of Energy converted debt and interest amounts from calendar year to Regulated Price Plan (RPP) periods.~~

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions. The total estimated cost of the program has already been revised downwards substantially to reflect revised inputs.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $27.7 billion[24] to approximately $~~18.5~~~~X~~20 billion[25]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as FSM and assume a 5% interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 ~~X~~ billion[26] to less than $1~~8~~9 ~~X~~ billion[27].

Q. In the development of Ontario's Fair Hydro Plan, did the government set up the financing structure intentionally to keep it off government books?

No. Global Adjustment (GA) refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

GA refinancing operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

~~**Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro Act? Would it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?**~~

~~Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).~~

[24] Ministry of Energy
[25] Ministry of Energy
~~[26] Ministry of Energy~~
~~[27] Ministry of Energy~~

~~OPG currently manages approximately $20 billion[28] in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.~~

~~OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization program and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.~~

~~OPG has developed solid investor relationships and has a large investor base in the structured finance space that would be the target market for financing Ontario's Fair Hydro Plan initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors[29], including major investors in the Canadian power and utility bonds market.~~

~~In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than $2 billion[30] and two commercial paper programs.~~

~~Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.~~

Q. ~~What does this mean for the~~How do you respond to the Financial Accountability Office's (FAO) suggestion from May 2017 that using Ontario Power Generation as the borrowing agent will cost $4 billion more? Why not have the Province borrow for the OFHP?

The policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets. Therefore, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the ratepayers – not the tax-base.

We believe it is appropriate for ratepayers to pay for the financing of electricity assets. The rate-base has a different risk profile than the tax-base, which would be reflected in different interest costs. Having the rate-base pay is not a new policy, for example Hydro One has borrowed in the capital markets since the early 2000s[31].

Commented [AL5]: Moved up from below question (see highlighted comment), amalgamated hereto reduce repetition

The $4 billion figure was an estimate made by the Financial Accountability Office (FAO) based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak

~~28 Ontario Financing Authority~~
~~29 Ontario Power Generation~~
~~30 Ontario Power Generation~~
31 Ministry of Finance

debt over the thirty year life of OFHP will be ~~below~~ approximately $~~20~~ ~~X~~20 billion[32]. The preliminary estimate from March 2017 was about $28 billion[33].

The FAO report itself concludes by saying "the FAO's estimates are subject to many assumptions and uncertainties (…) Fiscal impact may differ significantly from the FAO's estimates."

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $27.7 billion[34]to approximately $~~18.5X~~ 20 billion[35]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as FSM and assume a 5% interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 billion[36] to less than $19~~8~~ billion[37].

Q. Do you disagree with the FAO on financial costs?

With respect to the $4 billion[38] figure referenced by the Financial Accountability Office (FAO) in its May 2017, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be ~~below~~ approximately $~~20~~ ~~X~~ 20 billion[39]. The preliminary estimate from March 2017 was about $28 billion[40].

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions. The total estimated cost of the program has already been revised downwards substantially to reflect revised inputs.

---

[32] Ministry of Energy
[33] Ministry of Energy, submission to Financial Accountability Officer
[34] Ministry of Energy
[35] Ministry of Energy
~~[36] Ministry of Energy~~
~~[37] Ministry of Energy~~
[38] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*
[39] Ministry of Energy
[40] Ministry of Energy, submission to Financial Accountability Officer

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program. ~~Further details will be released in the 2017 Long-Term Energy Plan (2017 LTEP), which will be released on October 26, 2017.~~

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $27.7 billion[41] to approximately $~~18.5~~~~X~~20 billion[42]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as FSM and assume a 5% interest rate.

If pressed on interest costs:

The Ministry estimates of total interest cost also decreased from $25 billion[43] to less than $1~~8~~9 billion[44].

~~**Q. The OAG's report claims that consumers will pay an additional $4 billion in interest costs over the life of OFHP since OPG and its Financing Entity will pay a higher rate of interest compared to the Province. Why not have the Province borrow for the OFHP?**~~

Commented [AL6]: Amalgamated into above Q on 4 bill for succinctness

~~The policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets. Therefore, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the ratepayers – not the tax-base.~~

~~We believe it is appropriate for ratepayers to pay for the financing of electricity assets. The rate-base has a different risk profile than the tax-base, which would be reflected in different interest costs. Having the rate-base pay is not a new policy, for example Hydro One has borrowed in the capital markets since the early 2000s[45].~~

~~The $4 billion[46] figure in the Office of the Auditor General's report was sourced from the FAO's May 2017 report and is important to note, that the FAO's calculation was based on preliminary estimates of the program when peak debt estimates for the thirty year program were substantially higher and interest costs were forecast to be higher than current projections.~~

~~**Q. What is the Global Adjustment (GA)?**~~

~~The Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. The GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the~~

[41] Ministry of Energy
[42] Ministry of Energy
~~[43] Ministry of Energy~~
~~[44] Ministry of Energy~~
~~[45] Ministry of Finance~~
~~[46] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*~~

~~marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also accounts for costs associated with running conservation programs in the province.~~

~~GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a reliable supply of electricity.~~

~~GA pays for the bulk of the recent investments in the electricity system. The majority of the province's electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that generating assets are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets.~~

~~Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.~~

~~Q. Some say you are unfairly placing the burden of debt on future generations through things like Ontario's Fair Hydro Plan, how do you respond?~~

~~Future generations will be paying their fair share for a system they will be benefiting from in their lifetime. Not only will they benefit from a reliable electricity system, but from the cleaner air from the reduction of coal-fired generation.~~

~~Ontario's Fair Hydro Plan (OFHP) acts much like taking out a new mortgage – providing much-needed relief now by spreading costs across the life of our assets. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.~~

~~Moving forward, Ontario's 2017 Long-Term Energy Plan (2017 LTEP) focuses on continuing to put downward pressure on electricity bills over the long term. Our robust electricity supply puts us in a good position to improve efficiency, increase transparency and enhance opportunities for innovation and competition to further reduce system costs. That is why Ontario's Fair Hydro Plan includes a commitment to improving sector efficiency and modernizing Ontario's electricity market, building on the collaboration of the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).~~

~~For example, IESO's Market Renewal initiative will result in a more efficient marketplace with competitive and transparent mechanisms that meet future system needs at the lowest cost. The initiative is expected to save up to $5.2 billion[47] over a 10-year period and forms a key component of Ontario's plan to ensure the affordability of electricity in the longer term.~~

~~Q. Who was involved in the policy and implementation process to meet the mandate?~~

~~[47] Independent Electricity System Operator, *Assessment of the Benefits of Market Renewal (Brattle Group)*~~

~~Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.~~

~~The senior officials and staff were from:~~
- ~~Ministry of Energy;~~
- ~~Ministry of Finance;~~
- ~~Treasury Board Secretariat;~~
- ~~Office of the Provincial Controller;~~
- ~~Cabinet Office;~~
- ~~Ontario Financing Authority (OFA);~~
- ~~Independent Electricity System Operator (IESO); and~~
- ~~Ontario Power Generation Inc. (OPG).~~

~~In development and implementation of Global Adjustment (GA) refinancing, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.~~

~~*Document Search*~~

~~Q. Why has the Ministry of Energy not provided all e-mails requested by the Auditor General?~~

~~As of October 13, 2017, the Ministry has provided 13,212 emails and attachments to the OAG's office.~~

~~Q. How much money did the Ministry spend on lawyers?~~

~~The Ministry does not intend to spend more than $60,000 on this request. Although the retainer agreement includes a cap of up to $500,000, as of September 21, 2017, only $41,775.75 has actually been spent.~~

~~Q. What was the Ministry of Energy's process for providing the emails requested by the Auditor General?~~

~~The Ministry conducted a search consistent with the 40 plus search terms provided to the AG. In order to manage the approximately 2.2 million records resulted from the search of 81 custodians, the Ministry of Energy has selected McCarthys/Wortzmans to assist with processing and analysis of the documents. No legal advice on relevancy of documents was provided by Wortzmans. The Ministry has been regularly providing AG batches of responsive documents.~~

Commented [AL7]: Might suggest removing this level of detail on AG process in this context

Reasoning for Accounting Approach

Q. How do you respond to the Auditor General's claim that the government ignored warnings regarding a potential adverse audit opinion of Ontario's public accounts?

The government's financial statements are prepared in accordance with Public Sector Accounting Standards (PSAS), and will continue to follow these standards for the transactions resulting from Ontario's Fair Hydro Plan (OFHP) in 2017-18 and in future years.

In regards to rate-regulated accounting, PSAS are silent on the use of regulated accounting:

- PSAS acknowledges that it does not provide guidance on all possible transactions and notes that it is necessary to refer to other sources of guidance that are consistent with the PSAS framework; and
- US GAAP, with the most developed guidance on rate-regulated accounting, is the appropriate guidance to reference.

Many entities in Canada, including OPG and Hydro One use rate-regulated accounting:

- The OAG can refer to the CPA Canada research study that was shared.
- Rate-regulated accounting is well understood in the electricity sector.
- The recognition of regulatory assets brings IESO in line with 6 other independent system operators in North America, including AESO, ISO New England, NYISO, MISO, PJM and ERCOT.

The IESO management, IESO's Audit Committee, IESO's Board of Directors, IESO's external auditor and the Office of the Provincial Controller all support the use of rate-regulated accounting by IESO.

In the development of OFHP, the government consulted with several third party advisors in the application of accounting standards. This is normal course of business governments take for complex transactions.

TBS's Detailed QAs re Ontario's Fair Hydro Plan

Q. The Auditor General says that the accounting structure for Ontario's Fair Hydro Plan is not transparent, has poor value for money, and is not in accordance with Public Sector Accounting Standards. How do you respond?

The government has the utmost respect for all independent officers of the legislature, and values the important perspective they bring.

~~The Ministry of Energy, the Ministry of Finance, and the Treasury Board Secretariat remain committed to assisting the Office of the Auditor General so that it can provide its independent views to the Legislative Assembly.~~

With regards to the Auditor General's report on Ontario's Fair Hydro Plan (OFHP) – while the government does not agree with the assertions and conclusions expressed in the report, the government thanks the Office of the Auditor General for its report.

OFHP is delivering the single-largest reduction in electricity rates in the Province's history. In developing OFHP, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose. It is in accordance with Public Sector Accounting Standards (PSAS) and ensures the goals underlying the program are achieved in a cost-effective manner.

~~The implementation of OFHP is ongoing, with significant decisions with accounting and financial implications still being finalized.~~

The Province's financial statements are prepared in accordance with Canadian PSAS and will follow PSAS in accounting for the transactions resulting from OFHP in 2017-18, and in following years.

As PSAS is set by an independent standard-setting body in Canada focused specifically on the public sector, and because PSAS is used by all senior governments in Canada, presenting financial statements in accordance with PSAS results is transparent financial reporting for the Province of Ontario.

Ontario has a strong track record of producing high-quality financial reports on a timely basis, and will continue to move forward and present the Province's finances fairly, accurately and in accordance with PSAS.

~~The Ministry of Energy would welcome further questions about OFHP and the government's investments in a reliable energy system.~~

Commented [AL8]: Moved these statements in a few places since this set of QAs is being prepared for the Minister

Q. The Auditor General makes two recommendations in her report – to record the true financial impact of Ontario's Fair Hydro Plan; and to use a financing structure that is the least costly for Ontarians. Will you adopt these recommendations?

The government does not agree with the assertions and conclusions expressed in the report.

In developing OFHP, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose. It is in accordance with Public Sector Accounting Standards (PSAS) and ensures the goals underlying the program are achieved in a cost-effective manner.

In order to meet the needs of users, including the legislature and the public, for accountability in government reporting and decision making, it is essential that public sector financial statements reflect the economic substance of the government's activities.

The Province's financial statements are prepared in accordance with Canadian PSAS and will follow PSAS in accounting for the transactions resulting from OFHP in 2017-18, and in following years.

As PSAS is set by an independent standard-setting body in Canada focused specifically on the public sector, and because PSAS is used by all senior governments in Canada, presenting financial statements in accordance with PSAS results in transparent financial reporting for the Province of Ontario.

Ontario has a strong track record of producing high-quality financial reports on a timely basis, and will continue to move forward and present the Province's finances fairly, accurately and in accordance with PSAS.

The OFHP financing structure has been designed to provide electricity rate relief to current ratepayers, including by more fairly allocating costs for specified consumers, with the Global Adjustment cost amounts still ultimately borne by specified electricity ratepayers, as beneficiaries of those electricity system costs.

Ontario Power Generation (OPG) ~~is beginning the~~has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than the estimates in the May 2017 report of the Financial Accountability Office (FAO).

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately ~~below~~ $~~20~~ 20X billion[48]. The preliminary estimate from March 2017 was about $28 billion[49].

The Province will continue to prepare its consolidated financial statements in accordance with PSAS and continue to build on a track record of responsible fiscal management.

[48] Ministry of Energy
[49] Ministry of Energy, submission to Financial Accountability Officer

Q. Both the Auditor General and the Financial Accountability Officer (FAO) have raised serious concerns about the accounting treatment of the electricity cost refinancing initiative. Why should Ontarians believe this government over two independent officers of the Legislature?

The government has the utmost respect for all independent officers of the legislature, and values the important perspective they bring.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the Province's history.

In developing OFHP, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose. It is in accordance with Public Sector Accounting Standards (PSAS) and ensures the goals underlying the program are achieved in a cost-effective manner.

The Province, as always, will prepare its consolidated financial statements in accordance with PSAS and continue to build on its track record of responsible fiscal management.

Q. The Auditor General says that you are "obfuscating" the true financial impact of Ontario's Fair Hydro Plan through a "needlessly complex" accounting structure. How do you respond?

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the Province's history. In developing OFHP, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose. It is in accordance with Public Sector Accounting Standards (PSAS) and ensures the goals underlying the program are achieved in a cost-effective manner.

OFHP is comprised of a series of policy decisions. The impact of some of these decisions will be borne by the Province (taxpayers) where appropriate, such as sales tax relief and shifting social programs to the tax base; some will be borne by ratepayers, such as spreading the investment costs and benefits across ratepayers more fairly.

While the implementation of OFHP is ongoing, ~~with significant decisions with accounting and financial implications still being finalized, the financing plan for OFHP~~the plan and its impact will be transparent. Credit rating agencies, securities regulators, and the public will see full information and full reporting of the impacts of OFHP.

Ontario has a strong track record of producing high-quality financial reports on a timely basis. Ontario will continue to move forward and present the Province's finances fairly and accurately and in accordance with PSAS.

~~**Q. How can you justify the $4 billion in additional interest expenses that will be borne by ratepayers because of the way the government has structured electricity cost refinancing (i.e. using Ontario Power Generation to finance 55 per cent, at a higher interest rate than the Province, instead of the Province financing the entire electricity cost financing)?**~~

Commented [AL9]: Concept covered above

~~Ontario's Fair Hydro Plan (OFHP) is comprised of a series of policy decisions. The impact of some of these decisions will be borne by the Province (taxpayers) where appropriate, such as sales tax relief and shifting social programs to the tax base; some will be borne by ratepayers, such as spreading the investment costs and benefits across ratepayers more fairly.~~

~~The accounting will reflect the economic substance of the transactions in accordance with Public Sector Accounting Standards (PSAS) and will differentiate those costs of OFHP borne by taxpayers versus those borne by ratepayers.~~

~~The Auditor General's report suggests that all the costs of OFHP should be reflected as if they will be borne by taxpayers, which is inaccurate.~~

~~Ontario Power Generation (OPG) is beginning the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than the estimates in the May 2017 report of the Financial Accountability Officer (FAO).~~

~~Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be below $20 X billion[50]. The preliminary estimate from March 2017 was about $28 billion[51].~~

Q. The Auditor General said that a similar move to legislate accounting to defer costs was proposed with the restructuring of the Ontario electricity sector in the late 1990s, but the Auditor General's opinion at that time was that this would represent a departure from a central tenet of generally accepted accounting principles. The government at that time heard these concerns, and made the decision to not create an asset for future anticipated ratepayer payments. Why does the government think this is ok now?

The Auditor General's report makes a comparison between Ontario's Fair Hydro Plan (OFHP) and the Ontario Electricity Financial Corporation (OEFC) stranded debt. There are, however, crucial differences between the two.

For example, the OEFC stranded debt had already been incurred when the restructuring took place.

In the case of OFHP, the difference between what will be collected and what will be paid to generators is considered to be an asset in accordance with the accounting definition, as it will generate a specific future revenue stream in the form of the CEA.

~~[50] Ministry of Energy~~
~~[51] Ministry of Energy, submission to Financial Accountability Officer~~

It is important to note that the 1999 restructuring led to an “unbundling” of the electricity rate. Prior to the 1999 restructuring and the 2002 market opening, there was a “bundled rate” for electricity that included cost recovery of generation and transmission costs, operating and capital – including debt costs, as well as central market operations costs. Including debt cost recovery and matching the timing of the capital cost recovery with the benefit to the ratepayer is a normal rate-setting regulatory practice.

The Debt Retirement Charge (DRC) represented the unbundling of a portion of the debt service costs. It effectively amortized the cost of the investments in long-lived assets (including debt incurred).

OFHP’s Global Adjustment (GA) deferral is also intended to have costs recovered from specified ratepayers over a time period that better reflects the expected lives of those assets (versus the contract lengths that may be shorter than the expected useful life of the assets).

The difference between the 1999 restructuring and OFHP is that the DRC continued to pay down, over time, debt that had already been incurred, while under OFHP, an asset is being recorded to reflect a fair allocation of electricity costs between current and future ratepayers.

The intention of OFHP is to be forward-looking, to ensure that ratepayers are sharing current and future costs, whereas the DRC was backward-looking, replacing part of a bundled rate that was already spreading the cost recovery of the debt over time.

Q. What will happen if interest rates rise? The Financial Accountability Officer (FAO) estimates that if interest rates were to rise, the true cost of Ontario’s Fair Hydro Plan could be between $69 and $93 billion. How can you justify shifting this heavy burden onto future generations?

~~The implementation of Ontario’s Fair Hydro Plan (OFHP) is ongoing, with significant decisions with accounting and financial implications still being finalized.~~

Ontario Power Generation (OPG) ~~is beginning the process~~has begun the process of raising funds to finance the deferred costs of OFHP, and while total borrowing costs will not be known until the program is complete, accumulated interest is expected to be considerably less than the estimates cited in the May 2017 report of the FAO.

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions. Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report, and borrowing costs are now forecast to be substantially lower than original estimates.

Current government estimates forecast that the peak debt over the thirty year life of OFHP will be ~~below~~ approximately $~~20~~ 20~~X~~ billion[52]. The preliminary estimate from March 2017 was about $28 billion[53].

Future generations will be paying their fair share for a system they will be benefiting from in their lifetime. Not only will they benefit from a reliable electricity system, but from the cleaner air from the reduction of coal-fired generation.

[52] Ministry of Energy
[53] Ministry of Energy, submission to Financial Accountability Officer

Ontario's Fair Hydro Plan (OFHP) acts much like taking out a new mortgage – providing much-needed relief now by spreading costs across the life of our assets. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Government Officials

Q. The Auditor General says that even your own government officials flagged the unnecessarily high costs of Ontario's Fair Hydro Plan – and yet you chose to proceed. How can you justify this?

In developing Ontario's Fair Hydro Plan (OFHP), the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

Multiple options were considered in creating the OFHP framework – such as to have local distribution companies finance the difference between the amounts paid to the generators and the amounts collected from the ratepayers. This was rejected because of the inability of some local distribution companies to finance the balances.

~~The implementation of OFHP is ongoing, with significant decisions with accounting and financial implications still being finalized.~~

Ultimately, OFHP operates under a financial and accounting framework that is appropriate for the intended purpose. It is in accordance with Public Sector Accounting Standards (PSAS) and ensures the goals underlying the program are achieved in a cost-effective manner.

Audit Opinion

The government just received another qualified audit opinion on its Public Accounts – this time based on two separate issues. Why do you continue to disagree with the Auditor General?

The government continues to move forward and present the Province's finances fairly and accurately and in accordance with Canadian Public Sector Accounting Standards (PSAS). Ontario has a strong track record of producing high-quality financial reports on a timely basis. The Auditor General's qualified opinion is based on a different interpretation of PSAS for net pension assets and recognition of market accounts.

Last year there was a disagreement among the Province's professional accounting staff and the Auditor General's Office on the appropriate application of PSAS regarding pension accounting. As a result, the Pension Asset Expert Advisory Panel was established to deliver independent advice and recommendations on the issue to the Province.

The independent panel members concluded the Province's share of the net pension assets of both the Ontario Teachers' Pension Plan and the Ontario Public Service Employees' Union Pension Plan should be recognized in Ontario's financial statements.

After significant deliberation, including consideration of the recommendations of the panel, Ontario confirmed that the accounting for these plans prior to 2015-16 was appropriate, and are prepared in accordance with public sector accounting standards for pension asset accounting. Further, EY provided additional analysis and concluded that no valuation allowance was required for either plan as of March 31, 2017. The 2016-17 financial statements include these pension assets, and we continue to apply the accounting treatment of pension assets that the Province has used consistently since 2001. In addition, the 2015-16 financial statements were restated to include these assets.

This year the Independent Electricity System Operator (IESO) began recognizing its market accounts' assets (amounts due from power distributors) and liabilities (amounts due to power producers) in its financial results. The IESO has chosen to recognize these markets accounts on its books for transparency reasons, as it better reflects the financial position of IESO-administered markets at year-end. This change was supported by IESO's audit committee, its independent external auditor, and finally by the Office of the Provincial Controller. This change also has no impact to the Province's annual deficit, net debt or accumulated deficit.

This accounting is consistent with the presentation used previously by the Ontario Power Authority (which was merged with IESO on January 1, 2015) in its financial statements, which was not subject to qualification from the Office of the Auditor General at that time.

Q. The Auditor General says that you anticipated the government would receive a qualified audit opinion – and accepted this risk. In the private sector this would be unacceptable. How do you figure you can get away with this?

The Province's financial statements are prepared in accordance with Canadian Public Sector Accounting Standards (PSAS).

As PSAS is set by an independent standard-setting body in Canada focused specifically on the public sector, and because PSAS is used by all senior governments in Canada, presenting financial statements in accordance with PSAS results in transparent financial reporting for the Province of Ontario.

PSAS are principle based -- they are not a set of specific prescriptive rules. Applying them requires the application of professional judgment.

Our professional staff exercises judgment in applying the standards and as necessary consult with external experts and advisors. They provide the Office of the Auditor General with their written analysis on all significant issues that impact the financial statements for the year being audited, and they discuss the issues with the Office of the Auditor General.

All Chartered Professional Accountants (CPAs), including those employed by the Ontario Public Service (OPS), are required to comply with the Code of Professional Conduct for CPAs. One of those rules is that they not be associated with false or misleading information.

That means that if the professional accountants in the OPS do not agree with the judgment of the Ontario Auditor General, it is not as simple as just agreeing to accept the interpretation of the Office of the Auditor General if they believe that interpretation would result in false or misleading financial statements. While we expect professional accountants to agree on the vast majority of issues, we acknowledge that they may not agree on everything and when that occurs, and the difference is material to the financial statements, the Office of the Auditor General can choose to issue a qualified audit opinion.

Q. Are you concerned that the Auditor General will issue an adverse opinion on the Province's Public Accounts due to Ontario's Fair Hydro Plan accounting? What would be the impact on the Province's credit rating?

It would be inappropriate to speculate about how the Auditor General may issue an opinion for Public Accounts ~~next year~~in the future. ~~The implementation of Ontario's Fair Hydro Plan (OFHP) is ongoing, with significant decisions with accounting and financial implications still being finalized.~~

The Ministry of Energy, Finance and the Treasury Board Secretariat continue to work closely with Ontario Power Generation (OPG), the Independent Electricity System Operator (IESO) and third-party accounting, financing and energy experts ~~to ensure due diligence.~~on the implementation of Ontario's Fair Hydro Plan.

The Province's financial statements are prepared in accordance with Canadian PSAS and will follow PSAS in accounting for the transactions resulting from OFHP in 2017-18, and in following years.

~~The financing plan for~~ OFHP and its impact will be transparent. Credit rating agencies, securities regulators, and the public will see full information and full reporting of the impacts of OFHP.

Ontario has a strong track record of producing high-quality financial reports on a timely basis. Ontario will continue to move forward and present the Province's finances fairly and accurately and in accordance with PSAS.

Q. The Auditor General says that she has consulted with all of the Auditor Generals in Canada – and they agree with her assessments. How are we supposed to believe this government when all independent auditors in the country say you are wrong?

In developing Ontario's Fair Hydro Plan, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

PSAS are principle based -- they are not a set of specific prescriptive rules. Applying them requires the application of professional judgment.

Our professional staff exercises judgment in applying the standards and as necessary consult with external experts and advisors. They provide the Office of the Auditor General with their written analysis on all significant issues that impact the financial statements for the year being audited, and they discuss the issues with the Office of the Auditor General.

All Chartered Professional Accountants (CPAs), including those employed by the Ontario Public Service (OPS), are required to comply with the Code of Professional Conduct for CPAs. One of those rules is that they not be associated with false or misleading information.

That means that if the professional accountants in the OPS do not agree with the judgment of the Ontario Auditor General, it is not as simple as just agreeing to accept the interpretation of the Office of the Auditor General if they believe that interpretation would result in false or misleading financial statements. While we expect professional accountants to agree on the vast majority of issues, we acknowledge that they may not agree on everything and when that occurs, and the difference is material to the financial statements, the Office of the Auditor General can choose to issue a qualified audit opinion.

Q. Are you going to hire an expert advisory panel, as you did on the pension asset accounting matter, to settle this dispute with the Auditor General? If so, what authority would this panel have?

There are no plans to establish a panel at this time.

In developing Ontario's Fair Hydro Plan (OFHP), the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

The Province will continue to work with the Auditor General to build on the government's track record of responsible fiscal management and high quality financial reporting.

Independent Electricity System Operator (IESO)

The Auditor General was critical of the Independent Electricity System Operator's accounting changes, which formed part of her basis for a qualified opinion in the 2016-17 Public Accounts. Are these accounting changes inappropriate?

On recognizing market accounts' assets:

The Independent Electricity System Operator (IESO) began recognizing its market accounts' assets (amounts due from power distributors) and liabilities (amounts due to power producers) in its financial results. The IESO has chosen to recognize these markets accounts on its books for transparency reasons, as it better reflects its net financial position on behalf of the IESO-administered markets at year-end.

This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. These accounting changes were highlighted in the IESO's annual report which was published online in March 2017.

Further, this accounting is consistent with the presentation used previously by the Ontario Power Authority (which was merged with IESO on January 1, 2015) in its financial statements, which was not subject to qualification from the Office of the Auditor General (OAG) at that time.

This change has no impact to the Province's annual deficit, net debt or accumulated deficit.

This accounting change has been supported by the professional accounting staff of the Office of the Provincial Controller.

We will continue to work with the Auditor General to build on the government's track record of responsible fiscal management and high quality financial reporting.

On rate-regulated accounting:

The IESO made the decision to adopt rate-regulated accounting because it better reflects the economic substance of certain types of expenses that may not be directly recovered through the normal revenue requirement model.

The IESO, like Hydro One and Ontario Power Generation (OPG), is regulated by the Ontario Energy Board (OEB). The IESO adopted rate-regulated accounting for its year ended December 31, 2016. This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. These accounting changes were highlighted in IESO's annual report which was published online in March 2017.

Rate-regulated Accounting

Q. Why use rate-regulated accounting? What is its benefit?

In certain circumstances, an organization may be required to incur a large expenditure that will be recovered from ratepayers in the future.

For example, damage caused by an ice storm that results in extraordinary costs to restore a disruption of electricity services for customers. Such costs are subject to application and approval for recovery by the regulator over a specific time period.

What rate-regulated accounting does is it allows organizations to recognize those costs, which can be significant within a year but will generate benefits over time, to be matched over the same period that the amounts are recovered from ratepayers.

Q. The Auditor General says that the Independent Electricity System Operator's decision to adopt rate-regulated accounting was a deviation from Public Sector Accounting Standards, and cautioned against its use in her Independent Auditor's Report. Why was this change made and was it appropriate?

Canadian Public Sector Accounting Standards (PSAS) are effectively silent on this issue – they neither explicitly permit, nor prohibit, the recognition, measurement, presentation, or disclosure of rate-regulated activities.

In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards.

Paragraph 11 of the *Introduction to Public Sector Accounting Standards* ("Introduction") states: "When applying the CPA Canadian Public Sector Accounting (PSA) Handbook, where the standards are silent on an issue, public sector entities should apply Generally Accepted Accounting Principles (GAAP), Section PS 1150."

In this case, the Independent Electricity System Operator (IESO) consulted U.S. Generally Accepted Accounting Principles (GAAP), the appropriate accounting framework in North America that provides guidance on rate-regulated operations.

The IESO made the decision to adopt rate-regulated accounting because it better reflects the economic substance of certain types of expenses that may not be directly recovered through the normal revenue requirement model.

The IESO, like Hydro One and Ontario Power Generation (OPG), is regulated by the Ontario Energy Board (OEB). The IESO adopted rate-regulated accounting for its year ended December 31, 2016. This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. These accounting changes were highlighted in IESO's annual report which was published online in March 2017.

It is worth noting that currently 8 out of 9 electricity system operators in North American markets employ accounting for rate-regulated assets, including IESO.

Q. The Auditor General says that the use of rate-regulated accounting is inappropriate for the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB) according to U.S. Generally Accepted Accounting Principles. How do you respond?

In commenting on the use of rate-regulated accounting and the role of the Ontario Energy Board (OEB), the Auditor General's report makes reference to a requirement under U.S. accounting standards in connection with the use of rate-regulated accounting that "there must an independent regulator." This reference is misleading as it does not provide the criteria in its entirety, which is as follows:

"The entity's rates for regulated services or products provided to its customers are established by or are subject to approval by an independent, third-party regulator ***or by its own governing board empowered by statute or contract to establish rates that bind customers"*** *[ASC 980-10-15-2].*

The U.S. accounting standard was developed specifically to not preclude the application of rate-regulated accounting by government utilities where the rate regulator would not necessarily be viewed as independent (FAS 71, par. 64).

In addition, the position that rate-regulated accounting is precluded because the OEB is not considered independent of the government of Ontario is contradictory to accepting the use of rate-regulated accounting by Ontario Power Generation (OPG) and Hydro One – both of which are regulated by the OEB and whose results, using rate-regulated accounting, are and have been included in the consolidated financial statements of the Province.

IESO Response:

Canadian Public Sector Accounting Standards (PSAS) are effectively silent on this issue – they neither explicitly permit, nor prohibit, the recognition, measurement, presentation, or disclosure of rate-regulated activities.

In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards.

In this case, the Independent Electricity System Operator (IESO) consulted U.S. Generally Accepted Accounting Principles (GAAP), the appropriate accounting framework in North America that provides guidance on rate-regulated operations.

Legislated Accounting

Q. The Auditor General says that you are essentially making up your own accounting rules. How are Ontarians supposed to believe things like a "balanced budget" when you keep changing the rules?

The *Ontario Fair Hydro Plan Act, 2017* and its related regulations **do not** create accounting rules or legislate the accounting. This is a fundamental disagreement the government has with the Auditor General's report.

The OFHP operates under a financial and accounting framework that is appropriate for its intended purpose. It is in accordance with Public Sector Accounting Standards (PSAS) and ensures the goals underlying the program are achieved in a cost-effective manner.

The Province, as always, will prepare its consolidated financial statements in accordance with Public Sector Accounting Standards (PSAS). The recording of any asset resulting from transactions of OFHP will be assessed for recognition and measurement based on PSAS, and where appropriate, other accounting guidance where PSAS is silent on the issue.

Q. Why did the IESO change its accounting practices?

The Independent Electricity System Operator (IESO) began recognizing its market accounts' assets (i.e., amounts due from power distributors) and liabilities (i.e., amounts due to power producers) in their financial results.

This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. These accounting changes were highlighted in IESO's 2016 annual report, which was published online in March 2017.

The IESO has chosen to recognize these markets accounts on its books for transparency reasons, as it better reflects its net financial position on behalf of IESO-administered markets at year-end.

Further, this accounting is consistent with the presentation used previously by the Ontario Power Authority (which was merged with IESO on January 1, 2015) in its financial statements.

Additionally this accounting change has been supported by the professional accounting staff of the Office of the Provincial Controller.

This change has no impact to the province's annual deficit, net debt, accumulated deficit or on the ratepayers of Ontario.

We will continue to work with the Auditor General to build on the government's track record of responsible fiscal management and high quality financial reporting.

Q. Why did the government not use the Canadian Public Sector Accounting Standards (PSAS)? How was Ontario's Fair Hydro Plan (OFHP) financing structure determined?

The Province's financial statements are prepared in accordance with Canadian PSAS and will follow PSAS in accounting for the transactions resulting from OFHP in 2017-18 as well as in the following years. Presenting its financial statements in accordance with PSAS results in transparent financial reporting for the Province of Ontario.

PSAS is, however, silent on the recognition, measurement, presentation or disclosure of rate-regulated activities. In absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards. In this case, the Independent Electricity System Operator (IESO) consulted US GAAP, the accounting framework in North America that provides the most developed guidance on rate regulated operations.

This financing structure is similar to several jurisdictions in the U.S., and uses a form or securitization that is commonly used in the financial markets. It ensures the impact of the plan will be transparent.

Under this system, credit rating agencies, securities regulators and the public at large get full information and full reporting of the impacts of the OFHP that are visible and specific.

Q. The Auditor General says that the Province legislated accounting through the Ontario Fair Hydro Plan Act, which is not allowed according to Public Sector Accounting Standards (PSAS). Is this true?

The *Ontario Fair Hydro Plan Act, 2017* and its related regulations **do not** create accounting rules or legislate the accounting. This is a fundamental disagreement the government has with the Auditor General's report.

The Province, as always, will prepare its consolidated financial statements in accordance with Public Sector Accounting Standards (PSAS).

As PSAS is set by an independent standard-setting body in Canada focused specifically on the public sector, and because PSAS is used by all senior governments in Canada, presenting financial statements in accordance with PSAS results in transparent financial reporting for the Province of Ontario.

PSAS are principle based – they are not a set of specific prescriptive rules. Applying them requires the application of professional judgment.

Our professional staff exercises judgment in applying the standards and as necessary consult with external experts and advisors. They provide the Office of the Auditor General with their written analysis on all significant issues that impact the financial statements for the year being audited, and they discuss the issues with the Office of the Auditor General.

The role of the Ontario Energy Board (OEB) and its mandate is provided in legislation. It is not uncommon for government policy, through regulations, to provide the ground rules over which the OEB is to preside.

This is the case with Ontario's Fair Hydro Plan (OFHP) itself, as the Act and the various regulations provide the direction and processes over which the OEB is to exercise oversight, review, and make conclusion on submissions brought forward.

Relationship with the Office of the Auditor General

Q. The Auditor General alleges the government withheld information from her on the accounting treatment for Ontario's Fair Hydro Plan. Why would she say that?

The government is committed to assisting the Office of the Auditor General so that it can provide its independent views to the Legislative Assembly.

~~The implementation of Ontario's Fair Hydro Plan is ongoing, with significant accounting and financial decisions still being finalized.~~

Senior ministry officials ~~have~~ met and ~~continue to~~ worked with the Office of the Auditor General by participating in interviews and providing documentation.

If pressed:

The Auditor General was informed throughout the course of this process.

~~*If asked about the Ministry of Energy emails:*~~

~~The Ministry of Energy, Finance, and the Treasury Board Secretariat are committed to assisting the Auditor General. For questions related to the Ministry of Energy, please contact them directly.~~

Future Governments

Q. The Auditor General says that you are essentially handcuffing future governments with your financing structure. Why should future governments have to pay for your decisions?

By responsibly managing the Province's finances, Ontario balanced the budget in 2017-18, and will maintain a balanced budget for the future.

With a growing economy and a balanced budget, this is the time to make investments in key services that matter most to people, like health care and education, while at the same time lowering costs for necessities like electricity and child care.

Over the last decade government policies have supported rebuilding the electricity transmission and distribution grid, invested in clean generation, and closed the last coal-fired power plant. Prices have increased because our electricity system is being transformed – more than $70 billion[54] has been invested to modernize the system.

The government heard from people across the Province that the price of electricity had risen too quickly, which is why Ontario's Fair Hydro Plan (OFHP) will ensure costs are shared more fairly over the years ahead.

The Ontario electricity sector invested in renewing the provincial electricity system, including many new generating facilities, most of which operate under 20-year contracts. Some of these generators are expected to provide value to the electricity system beyond their contract lives. There is an opportunity to recognize the long-term benefit of these assets to the electricity system and "bring forward" that benefit for ratepayers today by deferring some of the current costs.

To relieve the current burden on ratepayers and share costs more fairly, a portion of the Global Adjustment (GA) is being refinanced. Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built.

In the early years, a portion of the costs covered by the GA is being refinanced to reduce pressure on today's electricity ratepayers. In later years, the cost of refinancing will be recovered from ratepayers.

OFHP is delivering the single-largest reduction in electricity rates in the Province's history. In developing OFHP, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

[54] Ministry of Energy, *2017 Long-Term Energy Plan*

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and ensures the goals underlying the program are achieved in a cost-effective manner.

The government recognizes that a fiscally sound approach to managing the Province's finances will provide the foundation for the long-term well-being and prosperity of Ontarians, and protect the public services that Ontarians rely on.

~~For further questions related to Ontario's Fair Hydro Plan, please contact the Ministry of Energy.~~

~~*Asset Sales*~~

~~**Q. Will you buy back Hydro One so that it is back under public control?**~~

~~Maximizing the value of designated assets is part of the government's economic plan for Ontario. The net revenue gains from these transactions are helping the government to deliver on its plan by investing in infrastructure.~~

~~The Trillium Trust Act, 2014, provides for the dedication to the Trillium Trust of net revenue gains associated with the sale of designated assets to support investments in transit, transportation and other priority infrastructure across the province.~~

~~The Province has also committed to using the cash amount of the proceeds related to the book value of the Hydro One shares sold to pay down the Province's electricity sector debt and other payables, helping to reduce the debt of the Ontario Electricity Financial Corporation (OEFC), which manages and pays down the debt and other liabilities of the former Ontario Hydro.~~

~~The government is on track to generate, over time, $4 billion[55] in net revenue gains to be invested in transit and infrastructure, along with $5 billion[56] to reduce debt, from broadening Hydro One's ownership.~~

~~The government will remain, by law, the largest single shareholder in Hydro One, restricting the Province from selling down to less than 40%[57] of the voting securities in Hydro One — and no other single shareholder or group of shareholders working in concert will be permitted to hold more than 10%[58] of the company's shares.~~

Commented [AL10]: Would suggest removing as may not be necessary in this context

~~[55] Ontario Financing Authority~~
~~[56] Ontario Financing Authority~~
~~[57] Ontario Financing Authority~~
~~[58] Ontario Financing Authority~~

FW_ For Review - OPG OFHP Tech Briefing QA(2).pdf

From:	Thiru, Dhil (ENERGY)
To:	Cayley, Daniel (ENERGY)
Cc:	Christie, Tim (ENERGY); DeSouza, Avril (ENERGY); Lightbody, Ava (ENERGY); Pinheiro, Alex (ENERGY)
Subject:	FW: For Review - OPG OFHP Tech Briefing QA
Date:	January 17, 2018 11:32:11 AM
Attachments:	QA - OPG OFHP Debt FinancingTech Briefing - AH - 20180117.docx

Hi Daniel,

Attached is a QA for the Minister's upcoming OPG OFHP Technical briefing. DMO has shared this note with ESP only so kindly let me know if you believe other divisions would need to be involved. Kindly return to me by EOD Wednesday January 24.

Thanks.

From: Hendy, Adam (ENERGY)
Sent: January-17-18 11:04 AM
To: Thiru, Dhil (ENERGY)
Cc: Cox, Hilary (ENERGY); @ENERGY-COMM-Issues_and_MediaRelations; Berg, Denna (ENERGY); Lyon, Sam (ENERGY)
Subject: For Review - OPG OFHP Tech Briefing QA

Hey Dhil,

Attached for review is a QA we have put together for the Minister's use at the upcoming OPG OFHP Technical Briefing. This is simply a refresh/updated version of the QA we used for the October tech briefing on the OAG's special report on the OFHP.

In the doc you will notice tracked X's as placeholders, these are in place of dollar figures that are likely to change when we know OPG's interest rate. Please feel free to change any numbers in the doc where appropriate.

Hoping we can get this back by Jan 25 at noon, or whenever the numbers become available to you.

Thanks,
Adam

QA - OPG OFHP Debt FinancingTech Briefing - A_2.pdf

Q&As – OFHP Debt Financing

Q. Why did the government introduce the Ontario Fair Hydro Plan?

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly $70 billion[1] has been invested in the electricity system, including more than $37[2] billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP has introduced new measures to lower electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

In developing the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. The Auditor General and the Financial Accountability Office both suggest that the cost of borrowing will be more expensive than traditional government borrowing? Is this true?

In the development of Ontario's Fair Hydro Plan (OFHP), the government made the policy decision that deferred electricity system costs should be borne by the rate-base and not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible consumers.

Ontario Power Generation (OPG) was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro Plan Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner.

OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization program and highly successful project debt issuances tied to new hydroelectric developments. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

---

[1] Ministry of Energy, *2017 Long-Term Energy Plan*
[2] Ministry of Energy, *2017 Long-Term Energy Plan*

With respect to the $4 billion[3] figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be below $~~20~~ X billion[4]. The preliminary estimate from March 2017 was about $28 billion[5].

Commented [HA(1]: For Policy: Xs are placeholders on figures that we believe could change when we know the interest rate, if the numbers are unchanged please feel free to reject the tracked changes. Please do not hesitate to change any other numbers as you see fit.

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions. The total estimated cost of the program has already been revised downwards substantially to reflect revised inputs.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $~~27.7~~X billion[6] to $~~18.5~~X billion[7]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $~~25~~ Xbillion[8] to $~~18~~ X billion[9].

Q. Have the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? I understand that the Office of the Audit General (OAG) has asked what are the factors that resulted in the changes in estimates from March 1 to August 31?

With respect to the $4 billion[10] figure referenced by the Financial Accountability Office (FAO) in its May 2017, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt

---

[3] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*
[4] Ministry of Energy
[5] Ministry of Energy, submission to Financial Accountability Officer
[6] Ministry of Energy
[7] Ministry of Energy
[8] Ministry of Energy
[9] Ministry of Energy
[10] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

over the thirty year life of OFHP will be below $~~20~~ x billion[11]. The preliminary estimate from March 2017 was about $28 billion[12].

The revised estimates are the result of the following factors:

- The Independent Electricity System Operator (IESO) updated its long-term cost projections for the electricity system and residential bills;
- The Ontario Energy Board (OEB) provided "actual data" with respect to residential bills for the May 1, 2017 to April 30, 2018 period; and
- Based on expert third-party advice the interest rate assumptions for OFHP were updated (i.e., from 5%[13] down to 4.5%[14]).

In addition, for the August 31, 2017 estimate, the Ministry of Energy converted debt and interest amounts from calendar year to Regulated Price Plan (RPP) periods.

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions. The total estimated cost of the program has already been revised downwards substantially to reflect revised inputs.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $27.7 billion[15] to $~~18.5~~X billion[16]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $~~25~~ X billion[17] to $~~18~~ X billion[18].

Q. In the development of Ontario's Fair Hydro Plan, did the government set up the financing structure intentionally to keep it off government books?

No. Global Adjustment (GA) refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

[11] Ministry of Energy
[12] Ministry of Energy, submission to Financial Accountability Officer
[13] Ministry of Energy
[14] Navigant Consulting, *Assessment of the Alignment of the Costs and Benefits of Clean Energy Assets*
[15] Ministry of Energy
[16] Ministry of Energy
[17] Ministry of Energy
[18] Ministry of Energy

GA refinancing operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro Act? Would it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?

Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).

OPG currently manages approximately $20 billion[19] in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.

OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization program and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

OPG has developed solid investor relationships and has a large investor base in the structured finance space that would be the target market for financing Ontario's Fair Hydro Plan initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors[20], including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than $2 billion[21] and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

Q. What does this mean for the Financial Accountability Office's (FAO) suggestion from May 2017 that using Ontario Power Generation as the borrowing agent will cost $4 billion more?

The $4 billion figure was an estimate made by the Financial Accountability Office (FAO) based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak

[19] Ontario Financing Authority
[20] Ontario Power Generation
[21] Ontario Power Generation

debt over the thirty year life of OFHP will be below $~~20~~ X billion[22]. The preliminary estimate from March 2017 was about $28 billion[23].

The FAO report itself concludes by saying "the FAO's estimates are subject to many assumptions and uncertainties (…) Fiscal impact may differ significantly from the FAO's estimates."

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $27.7 billion[24]to $~~18.5~~X billion[25]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 billion[26] to $~~18~~ Xbillion[27].

Q. Do you disagree with the FAO on financial costs?

With respect to the $4 billion[28] figure referenced by the Financial Accountability Office (FAO) in its May 2017, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be below $~~20~~ X billion[29]. The preliminary estimate from March 2017 was about $28 billion[30].

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions. The total estimated cost of the program has already been revised downwards substantially to reflect revised inputs.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program. Further details will be released in the 2017 Long-Term Energy Plan (2017 LTEP), which will be released on October 26, 2017.

If pressed on the details of the revised peak debt number:

---

22 Ministry of Energy
23 Ministry of Energy, submission to Financial Accountability Officer
24 Ministry of Energy
25 Ministry of Energy
26 Ministry of Energy
27 Ministry of Energy
28 Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*
29 Ministry of Energy
30 Ministry of Energy, submission to Financial Accountability Officer

Peak debt for OFHP has been revised down substantially from March 2017, from about $27.7 billion[31] to $~~18.5~~X billion[32]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

If pressed on interest costs:

The Ministry estimates of total interest cost also decreased from $25 billion[33] to $~~18~~ X billion[34].

Q. The OAG's report claims that consumers will pay an additional $4 billion in interest costs over the life of OFHP since OPG and its Financing Entity will pay a higher rate of interest compared to the Province. Why not have the Province borrow for the OFHP?

The policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets. Therefore, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the ratepayers – not the tax-base.

We believe it is appropriate for ratepayers to pay for the financing of electricity assets. The rate-base has a different risk profile than the tax-base, which would be reflected in different interest costs. Having the rate-base pay is not a new policy, for example Hydro One has borrowed in the capital markets since the early 2000s[35].

The $4 billion[36] figure in the Office of the Auditor General's report was sourced from the FAO's May 2017 report and is important to note, that the FAO's calculation was based on preliminary estimates of the program when peak debt estimates for the thirty year program were substantially higher and interest costs were forecast to be higher than current projections.

Q. What is the Global Adjustment (GA)?

The Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. The GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also accounts for costs associated with running conservation programs in the province.

GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a reliable supply of electricity.

GA pays for the bulk of the recent investments in the electricity system. The majority of the province's electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that generating assets are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets.

---

[31] Ministry of Energy
[32] Ministry of Energy
[33] Ministry of Energy
[34] Ministry of Energy
[35] Ministry of Finance
[36] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Q. Some say you are unfairly placing the burden of debt on future generations through things like Ontario's Fair Hydro Plan, how do you respond?

Future generations will be paying their fair share for a system they will be benefiting from in their lifetime. Not only will they benefit from a reliable electricity system, but from the cleaner air from the reduction of coal-fired generation.

Ontario's Fair Hydro Plan (OFHP) acts much like taking out a new mortgage – providing much-needed relief now by spreading costs across the life of our assets. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Moving forward, Ontario's 2017 Long-Term Energy Plan (2017 LTEP) focuses on continuing to put downward pressure on electricity bills over the long term. Our robust electricity supply puts us in a good position to improve efficiency, increase transparency and enhance opportunities for innovation and competition to further reduce system costs. That is why Ontario's Fair Hydro Plan includes a commitment to improving sector efficiency and modernizing Ontario's electricity market, building on the collaboration of the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).

For example, IESO's Market Renewal initiative will result in a more efficient marketplace with competitive and transparent mechanisms that meet future system needs at the lowest cost. The initiative is expected to save up to $5.2 billion[37] over a 10-year period and forms a key component of Ontario's plan to ensure the affordability of electricity in the longer term.

Q. Who was involved in the policy and implementation process to meet the mandate?

Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.

The senior officials and staff were from:
- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

[37] Independent Electricity System Operator, *Assessment of the Benefits of Market Renewal (Brattle Group)*

In development and implementation of Global Adjustment (GA) refinancing, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

Document Search

Q. Why has the Ministry of Energy not provided all e-mails requested by the Auditor General?

As of October 13, 2017, the Ministry has provided 13,212 emails and attachments to the OAG's office.

Q. How much money did the Ministry spend on lawyers?

The Ministry does not intend to spend more than $60,000 on this request. Although the retainer agreement includes a cap of up to $500,000, as of September 21, 2017, only $41,775.75 has actually been spent.
.

Q. What was the Ministry of Energy's process for providing the emails requested by the Auditor General?

The Ministry conducted a search consistent with the 40 plus search terms provided to the AG. In order to manage the approximately 2.2 million records resulted from the search of 81 custodians, the Ministry of Energy has selected McCarthys/Wortzmans to assist with processing and analysis of the documents. No legal advice on relevancy of documents was provided by Wortzmans. The Ministry has been regularly providing AG batches of responsive documents.

Reasoning for Accounting Approach

Q. How do you respond to the Auditor General's claim that the government ignored warnings regarding a potential adverse audit opinion of Ontario's public accounts?

The government's financial statements are prepared in accordance with Public Sector Accounting Standards (PSAS), and will continue to follow these standards for the transactions resulting from Ontario's Fair Hydro Plan (OFHP) in 2017-18 and in future years.

In regards to rate-regulated accounting, PSAS are silent on the use of regulated accounting:

- PSAS acknowledges that it does not provide guidance on all possible transactions and notes that it is necessary to refer to other sources of guidance that are consistent with the PSAS framework; and
- US GAAP, with the most developed guidance on rate-regulated accounting, is the appropriate guidance to reference.

Many entities in Canada, including OPG and Hydro One use rate-regulated accounting:

- The OAG can refer to the CPA Canada research study that was shared.
- Rate-regulated accounting is well understood in the electricity sector.

- The recognition of regulatory assets brings IESO in line with 6 other independent system operators in North America, including AESO, ISO New England, NYISO, MISO, PJM and ERCOT.

The IESO management, IESO's Audit Committee, IESO's Board of Directors, IESO's external auditor and the Office of the Provincial Controller all support the use of rate-regulated accounting by IESO.

In the development of OFHP, the government consulted with several third party advisors in the application of accounting standards. This is normal course of business governments take for complex transactions.

TBS's Detailed QAs re Ontario's Fair Hydro Plan

Q. The Auditor General says that the accounting structure for Ontario's Fair Hydro Plan is not transparent, has poor value for money, and is not in accordance with Public Sector Accounting Standards. How do you respond?

The government has the utmost respect for all independent officers of the legislature, and values the important perspective they bring.

The Ministry of Energy, the Ministry of Finance, and the Treasury Board Secretariat remain committed to assisting the Office of the Auditor General so that it can provide its independent views to the Legislative Assembly.

With regards to the Auditor General's report on Ontario's Fair Hydro Plan (OFHP) – while the government does not agree with the assertions and conclusions expressed in the report, the government thanks the Office of the Auditor General for its report.

OFHP is delivering the single-largest reduction in electricity rates in the Province's history. In developing OFHP, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose. It is in accordance with Public Sector Accounting Standards (PSAS) and ensures the goals underlying the program are achieved in a cost-effective manner.

The implementation of OFHP is ongoing, with significant decisions with accounting and financial implications still being finalized.

The Province's financial statements are prepared in accordance with Canadian PSAS and will follow PSAS in accounting for the transactions resulting from OFHP in 2017-18, and in following years.

As PSAS is set by an independent standard-setting body in Canada focused specifically on the public sector, and because PSAS is used by all senior governments in Canada, presenting financial statements in accordance with PSAS results is transparent financial reporting for the Province of Ontario.

Ontario has a strong track record of producing high-quality financial reports on a timely basis, and will continue to move forward and present the Province's finances fairly, accurately and in accordance with PSAS.

The Ministry of Energy would welcome further questions about OFHP and the government's investments in a reliable energy system.

Q. The Auditor General makes two recommendations in her report – to record the true financial impact of Ontario's Fair Hydro Plan; and to use a financing structure that is the least costly for Ontarians. Will you adopt these recommendations?

The government does not agree with the assertions and conclusions expressed in the report.

In developing OFHP, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose. It is in accordance with Public Sector Accounting Standards (PSAS) and ensures the goals underlying the program are achieved in a cost-effective manner.

In order to meet the needs of users, including the legislature and the public, for accountability in government reporting and decision making, it is essential that public sector financial statements reflect the economic substance of the government's activities.

The Province's financial statements are prepared in accordance with Canadian PSAS and will follow PSAS in accounting for the transactions resulting from OFHP in 2017-18, and in following years.

As PSAS is set by an independent standard-setting body in Canada focused specifically on the public sector, and because PSAS is used by all senior governments in Canada, presenting financial statements in accordance with PSAS results in transparent financial reporting for the Province of Ontario.

Ontario has a strong track record of producing high-quality financial reports on a timely basis, and will continue to move forward and present the Province's finances fairly, accurately and in accordance with PSAS.

The OFHP financing structure has been designed to provide electricity rate relief to current ratepayers, including by more fairly allocating costs for specified consumers, with the Global Adjustment cost amounts still ultimately borne by specified electricity ratepayers, as beneficiaries of those electricity system costs.

Ontario Power Generation (OPG) is beginning the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than the estimates in the May 2017 report of the Financial Accountability Office (FAO).

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be below $~~20~~ X billion[38]. The preliminary estimate from March 2017 was about $28 billion[39].

The Province will continue to prepare its consolidated financial statements in accordance with PSAS and continue to build on a track record of responsible fiscal management.

[38] Ministry of Energy
[39] Ministry of Energy, submission to Financial Accountability Officer

Q. Both the Auditor General and the Financial Accountability Officer (FAO) have raised serious concerns about the accounting treatment of the electricity cost refinancing initiative. Why should Ontarians believe this government over two independent officers of the Legislature?

The government has the utmost respect for all independent officers of the legislature, and values the important perspective they bring.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the Province's history.

In developing OFHP, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose. It is in accordance with Public Sector Accounting Standards (PSAS) and ensures the goals underlying the program are achieved in a cost-effective manner.

The Province, as always, will prepare its consolidated financial statements in accordance with PSAS and continue to build on its track record of responsible fiscal management.

Q. The Auditor General says that you are "obfuscating" the true financial impact of Ontario's Fair Hydro Plan through a "needlessly complex" accounting structure. How do you respond?

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the Province's history. In developing OFHP, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose. It is in accordance with Public Sector Accounting Standards (PSAS) and ensures the goals underlying the program are achieved in a cost-effective manner.

OFHP is comprised of a series of policy decisions. The impact of some of these decisions will be borne by the Province (taxpayers) where appropriate, such as sales tax relief and shifting social programs to the tax base; some will be borne by ratepayers, such as spreading the investment costs and benefits across ratepayers more fairly.

While the implementation of OFHP is ongoing, with significant decisions with accounting and financial implications still being finalized, the financing plan for OFHP and its impact will be transparent. Credit rating agencies, securities regulators, and the public will see full information and full reporting of the impacts of OFHP.

Ontario has a strong track record of producing high-quality financial reports on a timely basis. Ontario will continue to move forward and present the Province's finances fairly and accurately and in accordance with PSAS.

Q. How can you justify the $4 billion in additional interest expenses that will be borne by ratepayers because of the way the government has structured electricity cost refinancing (i.e. using Ontario Power Generation to finance 55 per cent, at a higher interest rate than the Province, instead of the Province financing the entire electricity cost financing)?

Ontario's Fair Hydro Plan (OFHP) is comprised of a series of policy decisions. The impact of some of these decisions will be borne by the Province (taxpayers) where appropriate, such as sales tax relief and shifting social programs to the tax base; some will be borne by ratepayers, such as spreading the investment costs and benefits across ratepayers more fairly.

The accounting will reflect the economic substance of the transactions in accordance with Public Sector Accounting Standards (PSAS) and will differentiate those costs of OFHP borne by taxpayers versus those borne by ratepayers.

The Auditor General's report suggests that all the costs of OFHP should be reflected as if they will be borne by taxpayers, which is inaccurate.

Ontario Power Generation (OPG) is beginning the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than the estimates in the May 2017 report of the Financial Accountability Officer (FAO).

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be below $~~20~~ X billion[40]. The preliminary estimate from March 2017 was about $28 billion[41].

Q. The Auditor General said that a similar move to legislate accounting to defer costs was proposed with the restructuring of the Ontario electricity sector in the late 1990s, but the Auditor General's opinion at that time was that this would represent a departure from a central tenet of generally accepted accounting principles. The government at that time heard these concerns, and made the decision to not create an asset for future anticipated ratepayer payments. Why does the government think this is ok now?

The Auditor General's report makes a comparison between Ontario's Fair Hydro Plan (OFHP) and the Ontario Electricity Financial Corporation (OEFC) stranded debt. There are, however, crucial differences between the two.

For example, the OEFC stranded debt had already been incurred when the restructuring took place.

In the case of OFHP, the difference between what will be collected and what will be paid to generators is considered to be an asset in accordance with the accounting definition, as it will generate a specific future revenue stream in the form of the CEA.

[40] Ministry of Energy
[41] Ministry of Energy, submission to Financial Accountability Officer

It is important to note that the 1999 restructuring led to an "unbundling" of the electricity rate. Prior to the 1999 restructuring and the 2002 market opening, there was a "bundled rate" for electricity that included cost recovery of generation and transmission costs, operating and capital – including debt costs, as well as central market operations costs. Including debt cost recovery and matching the timing of the capital cost recovery with the benefit to the ratepayer is a normal rate-setting regulatory practice.

The Debt Retirement Charge (DRC) represented the unbundling of a portion of the debt service costs. It effectively amortized the cost of the investments in long-lived assets (including debt incurred).

OFHP's Global Adjustment (GA) deferral is also intended to have costs recovered from specified ratepayers over a time period that better reflects the expected lives of those assets (versus the contract lengths that may be shorter than the expected useful life of the assets).

The difference between the 1999 restructuring and OFHP is that the DRC continued to pay down, over time, debt that had already been incurred, while under OFHP, an asset is being recorded to reflect a fair allocation of electricity costs between current and future ratepayers.

The intention of OFHP is to be forward-looking, to ensure that ratepayers are sharing current and future costs, whereas the DRC was backward-looking, replacing part of a bundled rate that was already spreading the cost recovery of the debt over time.

Q. What will happen if interest rates rise? The Financial Accountability Officer (FAO) estimates that if interest rates were to rise, the true cost of Ontario's Fair Hydro Plan could be between $69 and $93 billion. How can you justify shifting this heavy burden onto future generations?

The implementation of Ontario's Fair Hydro Plan (OFHP) is ongoing, with significant decisions with accounting and financial implications still being finalized.

Ontario Power Generation (OPG) is beginning the process of raising funds to finance the deferred costs of OFHP, and while total borrowing costs will not be known until the program is complete, accumulated interest is expected to be considerably less than the estimates cited in the May 2017 report of the FAO.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report, and borrowing costs are now forecast to be substantially lower than original estimates.

Current government estimates forecast that the peak debt over the thirty year life of OFHP will be below $~~20~~ X billion[42]. The preliminary estimate from March 2017 was about $28 billion[43].

Government Officials

Q. The Auditor General says that even your own government officials flagged the unnecessarily high costs of Ontario's Fair Hydro Plan – and yet you chose to proceed. How can you justify this?

[42] Ministry of Energy
[43] Ministry of Energy, submission to Financial Accountability Officer

In developing Ontario's Fair Hydro Plan (OFHP), the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

Multiple options were considered in creating the OFHP framework – such as to have local distribution companies finance the difference between the amounts paid to the generators and the amounts collected from the ratepayers. This was rejected because of the inability of some local distribution companies to finance the balances.

The implementation of OFHP is ongoing, with significant decisions with accounting and financial implications still being finalized.

Ultimately, OFHP operates under a financial and accounting framework that is appropriate for the intended purpose. It is in accordance with Public Sector Accounting Standards (PSAS) and ensures the goals underlying the program are achieved in a cost-effective manner.

Audit Opinion

The government just received another qualified audit opinion on its Public Accounts – this time based on two separate issues. Why do you continue to disagree with the Auditor General?

The government continues to move forward and present the Province's finances fairly and accurately and in accordance with Canadian Public Sector Accounting Standards (PSAS). Ontario has a strong track record of producing high-quality financial reports on a timely basis. The Auditor General's qualified opinion is based on a different interpretation of PSAS for net pension assets and recognition of market accounts.

Last year there was a disagreement among the Province's professional accounting staff and the Auditor General's Office on the appropriate application of PSAS regarding pension accounting. As a result, the Pension Asset Expert Advisory Panel was established to deliver independent advice and recommendations on the issue to the Province.

The independent panel members concluded the Province's share of the net pension assets of both the Ontario Teachers' Pension Plan and the Ontario Public Service Employees' Union Pension Plan should be recognized in Ontario's financial statements.

After significant deliberation, including consideration of the recommendations of the panel, Ontario confirmed that the accounting for these plans prior to 2015-16 was appropriate, and are prepared in accordance with public sector accounting standards for pension asset accounting. Further, EY provided additional analysis and concluded that no valuation allowance was required for either plan as of March 31, 2017. The 2016-17 financial statements include these pension assets, and we continue to apply the accounting treatment of pension assets that the Province has used consistently since 2001. In addition, the 2015-16 financial statements were restated to include these assets.

This year the Independent Electricity System Operator (IESO) began recognizing its market accounts' assets (amounts due from power distributors) and liabilities (amounts due to power producers) in its financial results. The IESO has chosen to recognize these markets accounts on its books for transparency reasons, as it better reflects the financial position of IESO-administered markets at year-end. This change was supported by IESO's audit committee, its independent external auditor, and finally by the Office of the Provincial Controller. This change also has no impact to the Province's annual deficit, net debt or accumulated deficit.

This accounting is consistent with the presentation used previously by the Ontario Power Authority (which was merged with IESO on January 1, 2015) in its financial statements, which was not subject to qualification from the Office of the Auditor General at that time.

Q. The Auditor General says that you anticipated the government would receive a qualified audit opinion – and accepted this risk. In the private sector this would be unacceptable. How do you figure you can get away with this?

The Province's financial statements are prepared in accordance with Canadian Public Sector Accounting Standards (PSAS).

As PSAS is set by an independent standard-setting body in Canada focused specifically on the public sector, and because PSAS is used by all senior governments in Canada, presenting financial statements in accordance with PSAS results in transparent financial reporting for the Province of Ontario.

PSAS are principle based -- they are not a set of specific prescriptive rules. Applying them requires the application of professional judgment.

Our professional staff exercises judgment in applying the standards and as necessary consult with external experts and advisors. They provide the Office of the Auditor General with their written analysis on all significant issues that impact the financial statements for the year being audited, and they discuss the issues with the Office of the Auditor General.

All Chartered Professional Accountants (CPAs), including those employed by the Ontario Public Service (OPS), are required to comply with the Code of Professional Conduct for CPAs. One of those rules is that they not be associated with false or misleading information.

That means that if the professional accountants in the OPS do not agree with the judgment of the Ontario Auditor General, it is not as simple as just agreeing to accept the interpretation of the Office of the Auditor General if they believe that interpretation would result in false or misleading financial statements. While we expect professional accountants to agree on the vast majority of issues, we acknowledge that they may not agree on everything and when that occurs, and the difference is material to the financial statements, the Office of the Auditor General can choose to issue a qualified audit opinion.

Q. Are you concerned that the Auditor General will issue an adverse opinion on the Province's Public Accounts due to Ontario's Fair Hydro Plan accounting? What would be the impact on the Province's credit rating?

It would be inappropriate to speculate about how the Auditor General may issue an opinion for Public Accounts next year. The implementation of Ontario's Fair Hydro Plan (OFHP) is ongoing, with significant decisions with accounting and financial implications still being finalized.

The Ministry of Energy, Finance and the Treasury Board Secretariat continue to work closely with Ontario Power Generation (OPG), the Independent Electricity System Operator (IESO) and third-party accounting, financing and energy experts to ensure due diligence.

The Province's financial statements are prepared in accordance with Canadian PSAS and will follow PSAS in accounting for the transactions resulting from OFHP in 2017-18, and in following years.

The financing plan for OFHP and its impact will be transparent. Credit rating agencies, securities regulators, and the public will see full information and full reporting of the impacts of OFHP.

Ontario has a strong track record of producing high-quality financial reports on a timely basis. Ontario will continue to move forward and present the Province's finances fairly and accurately and in accordance with PSAS.

Q. The Auditor General says that she has consulted with all of the Auditor Generals in Canada – and they agree with her assessments. How are we supposed to believe this government when all independent auditors in the country say you are wrong?

In developing Ontario's Fair Hydro Plan, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

PSAS are principle based -- they are not a set of specific prescriptive rules. Applying them requires the application of professional judgment.

Our professional staff exercises judgment in applying the standards and as necessary consult with external experts and advisors. They provide the Office of the Auditor General with their written analysis on all significant issues that impact the financial statements for the year being audited, and they discuss the issues with the Office of the Auditor General.

All Chartered Professional Accountants (CPAs), including those employed by the Ontario Public Service (OPS), are required to comply with the Code of Professional Conduct for CPAs. One of those rules is that they not be associated with false or misleading information.

That means that if the professional accountants in the OPS do not agree with the judgment of the Ontario Auditor General, it is not as simple as just agreeing to accept the interpretation of the Office of the Auditor General if they believe that interpretation would result in false or misleading financial statements. While we expect professional accountants to agree on the vast majority of issues, we acknowledge that they may not agree on everything and when that occurs, and the difference is material to the financial statements, the Office of the Auditor General can choose to issue a qualified audit opinion.

Q. Are you going to hire an expert advisory panel, as you did on the pension asset accounting matter, to settle this dispute with the Auditor General? If so, what authority would this panel have?

There are no plans to establish a panel at this time.

In developing Ontario's Fair Hydro Plan (OFHP), the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

The Province will continue to work with the Auditor General to build on the government's track record of responsible fiscal management and high quality financial reporting.

Independent Electricity System Operator (IESO)

The Auditor General was critical of the Independent Electricity System Operator's accounting changes, which formed part of her basis for a qualified opinion in the 2016-17 Public Accounts. Are these accounting changes inappropriate?

On recognizing market accounts' assets:

The Independent Electricity System Operator (IESO) began recognizing its market accounts' assets (amounts due from power distributors) and liabilities (amounts due to power producers) in its financial results. The IESO has chosen to recognize these markets accounts on its books for transparency reasons, as it better reflects its net financial position on behalf of the IESO-administered markets at year-end.

This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. These accounting changes were highlighted in the IESO's annual report which was published online in March 2017.

Further, this accounting is consistent with the presentation used previously by the Ontario Power Authority (which was merged with IESO on January 1, 2015) in its financial statements, which was not subject to qualification from the Office of the Auditor General (OAG) at that time.

This change has no impact to the Province's annual deficit, net debt or accumulated deficit.

This accounting change has been supported by the professional accounting staff of the Office of the Provincial Controller.

We will continue to work with the Auditor General to build on the government's track record of responsible fiscal management and high quality financial reporting.

On rate-regulated accounting:

The IESO made the decision to adopt rate-regulated accounting because it better reflects the economic substance of certain types of expenses that may not be directly recovered through the normal revenue requirement model.

The IESO, like Hydro One and Ontario Power Generation (OPG), is regulated by the Ontario Energy Board (OEB). The IESO adopted rate-regulated accounting for its year ended December 31, 2016. This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. These accounting changes were highlighted in IESO's annual report which was published online in March 2017.

Rate-regulated Accounting

Q. Why use rate-regulated accounting? What is its benefit?

In certain circumstances, an organization may be required to incur a large expenditure that will be recovered from ratepayers in the future.

For example, damage caused by an ice storm that results in extraordinary costs to restore a disruption of electricity services for customers. Such costs are subject to application and approval for recovery by the regulator over a specific time period.

What rate-regulated accounting does is it allows organizations to recognize those costs, which can be significant within a year but will generate benefits over time, to be matched over the same period that the amounts are recovered from ratepayers.

Q. The Auditor General says that the Independent Electricity System Operator's decision to adopt rate-regulated accounting was a deviation from Public Sector Accounting Standards, and cautioned against its use in her Independent Auditor's Report. Why was this change made and was it appropriate?

Canadian Public Sector Accounting Standards (PSAS) are effectively silent on this issue – they neither explicitly permit, nor prohibit, the recognition, measurement, presentation, or disclosure of rate-regulated activities.

In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards.

Paragraph 11 of the *Introduction to Public Sector Accounting Standards* ("Introduction") states: "When applying the CPA Canadian Public Sector Accounting (PSA) Handbook, where the standards are silent on an issue, public sector entities should apply Generally Accepted Accounting Principles (GAAP), Section PS 1150."

In this case, the Independent Electricity System Operator (IESO) consulted U.S. Generally Accepted Accounting Principles (GAAP), the appropriate accounting framework in North America that provides guidance on rate-regulated operations.

The IESO made the decision to adopt rate-regulated accounting because it better reflects the economic substance of certain types of expenses that may not be directly recovered through the normal revenue requirement model.

The IESO, like Hydro One and Ontario Power Generation (OPG), is regulated by the Ontario Energy Board (OEB). The IESO adopted rate-regulated accounting for its year ended December 31, 2016. This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. These accounting changes were highlighted in IESO's annual report which was published online in March 2017.

It is worth noting that currently 8 out of 9 electricity system operators in North American markets employ accounting for rate-regulated assets, including IESO.

Q. The Auditor General says that the use of rate-regulated accounting is inappropriate for the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB) according to U.S. Generally Accepted Accounting Principles. How do you respond?

In commenting on the use of rate-regulated accounting and the role of the Ontario Energy Board (OEB), the Auditor General's report makes reference to a requirement under U.S. accounting standards in connection with the use of rate-regulated accounting that "there must an independent regulator." This reference is misleading as it does not provide the criteria in its entirety, which is as follows:

*"The entity's rates for regulated services or products provided to its customers are established by or are subject to approval by an independent, third-party regulator **or by its own governing board empowered by statute or contract to establish rates that bind customers"** [ASC 980-10-15-2].*

The U.S. accounting standard was developed specifically to not preclude the application of rate-regulated accounting by government utilities where the rate regulator would not necessarily be viewed as independent (FAS 71, par. 64).

In addition, the position that rate-regulated accounting is precluded because the OEB is not considered independent of the government of Ontario is contradictory to accepting the use of rate-regulated accounting by Ontario Power Generation (OPG) and Hydro One – both of which are regulated by the OEB and whose results, using rate-regulated accounting, are and have been included in the consolidated financial statements of the Province.

IESO Response:

Canadian Public Sector Accounting Standards (PSAS) are effectively silent on this issue – they neither explicitly permit, nor prohibit, the recognition, measurement, presentation, or disclosure of rate-regulated activities.

In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards.

In this case, the Independent Electricity System Operator (IESO) consulted U.S. Generally Accepted Accounting Principles (GAAP), the appropriate accounting framework in North America that provides guidance on rate-regulated operations.

<u>Legislated Accounting</u>

Q. The Auditor General says that you are essentially making up your own accounting rules. How are Ontarians supposed to believe things like a "balanced budget" when you keep changing the rules?

The *Ontario Fair Hydro Plan Act, 2017* and its related regulations **do not** create accounting rules or legislate the accounting. This is a fundamental disagreement the government has with the Auditor General's report.

The OFHP operates under a financial and accounting framework that is appropriate for its intended purpose. It is in accordance with Public Sector Accounting Standards (PSAS) and ensures the goals underlying the program are achieved in a cost-effective manner.

The Province, as always, will prepare its consolidated financial statements in accordance with Public Sector Accounting Standards (PSAS). The recording of any asset resulting from transactions of OFHP will be assessed for recognition and measurement based on PSAS, and where appropriate, other accounting guidance where PSAS is silent on the issue.

Q. Why did the IESO change its accounting practices?

The Independent Electricity System Operator (IESO) began recognizing its market accounts' assets (i.e., amounts due from power distributors) and liabilities (i.e., amounts due to power producers) in their financial results.

This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. These accounting changes were highlighted in IESO's 2016 annual report, which was published online in March 2017.

The IESO has chosen to recognize these markets accounts on its books for transparency reasons, as it better reflects its net financial position on behalf of IESO-administered markets at year-end.

Further, this accounting is consistent with the presentation used previously by the Ontario Power Authority (which was merged with IESO on January 1, 2015) in its financial statements.

Additionally this accounting change has been supported by the professional accounting staff of the Office of the Provincial Controller.

This change has no impact to the province's annual deficit, net debt, accumulated deficit or on the ratepayers of Ontario.

We will continue to work with the Auditor General to build on the government's track record of responsible fiscal management and high quality financial reporting.

Q. Why did the government not use the Canadian Public Sector Accounting Standards (PSAS)? How was Ontario's Fair Hydro Plan (OFHP) financing structure determined?

The Province's financial statements are prepared in accordance with Canadian PSAS and will follow PSAS in accounting for the transactions resulting from OFHP in 2017-18 as well as in the following years. Presenting its financial statements in accordance with PSAS results in transparent financial reporting for the Province of Ontario.

PSAS is, however, silent on the recognition, measurement, presentation or disclosure of rate-regulated activities. In absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards. In this case, the Independent Electricity System Operator (IESO) consulted US GAAP, the accounting framework in North America that provides the most developed guidance on rate regulated operations.

This financing structure is similar to several jurisdictions in the U.S., and uses a form or securitization that is commonly used in the financial markets. It ensures the impact of the plan will be transparent. Under this system, credit rating agencies, securities regulators and the public at large get full information and full reporting of the impacts of the OFHP that are visible and specific.

Q. The Auditor General says that the Province legislated accounting through the Ontario Fair Hydro Plan Act, which is not allowed according to Public Sector Accounting Standards (PSAS). Is this true?

The *Ontario Fair Hydro Plan Act, 2017* and its related regulations **do not** create accounting rules or legislate the accounting. This is a fundamental disagreement the government has with the Auditor General's report.

The Province, as always, will prepare its consolidated financial statements in accordance with Public Sector Accounting Standards (PSAS).

As PSAS is set by an independent standard-setting body in Canada focused specifically on the public sector, and because PSAS is used by all senior governments in Canada, presenting financial statements in accordance with PSAS results in transparent financial reporting for the Province of Ontario.

PSAS are principle based – they are not a set of specific prescriptive rules. Applying them requires the application of professional judgment.

Our professional staff exercises judgment in applying the standards and as necessary consult with external experts and advisors. They provide the Office of the Auditor General with their written analysis on all significant issues that impact the financial statements for the year being audited, and they discuss the issues with the Office of the Auditor General.

The role of the Ontario Energy Board (OEB) and its mandate is provided in legislation. It is not uncommon for government policy, through regulations, to provide the ground rules over which the OEB is to preside.

This is the case with Ontario's Fair Hydro Plan (OFHP) itself, as the Act and the various regulations provide the direction and processes over which the OEB is to exercise oversight, review, and make conclusion on submissions brought forward.

Relationship with the Office of the Auditor General

Q. The Auditor General alleges the government withheld information from her on the accounting treatment for Ontario's Fair Hydro Plan. Why would she say that?

The government is committed to assisting the Office of the Auditor General so that it can provide its independent views to the Legislative Assembly.

The implementation of Ontario's Fair Hydro Plan is ongoing, with significant accounting and financial decisions still being finalized.

Senior ministry officials have met and continue to work with the Office of the Auditor General by participating in interviews and providing documentation.

If pressed:

The Auditor General was informed throughout the course of this process.

If asked about the Ministry of Energy emails:

The Ministry of Energy, Finance, and the Treasury Board Secretariat are committed to assisting the Auditor General. For questions related to the Ministry of Energy, please contact them directly.

Future Governments

Q. The Auditor General says that you are essentially handcuffing future governments with your financing structure. Why should future governments have to pay for your decisions?

By responsibly managing the Province's finances, Ontario balanced the budget in 2017-18, and will maintain a balanced budget for the future.

With a growing economy and a balanced budget, this is the time to make investments in key services that matter most to people, like health care and education, while at the same time lowering costs for necessities like electricity and child care.

Over the last decade government policies have supported rebuilding the electricity transmission and distribution grid, invested in clean generation, and closed the last coal-fired power plant. Prices have increased because our electricity system is being transformed – more than $70 billion[44] has been invested to modernize the system.

The government heard from people across the Province that the price of electricity had risen too quickly, which is why Ontario's Fair Hydro Plan (OFHP) will ensure costs are shared more fairly over the years ahead.

The Ontario electricity sector invested in renewing the provincial electricity system, including many new generating facilities, most of which operate under 20-year contracts. Some of these generators are expected to provide value to the electricity system beyond their contract lives. There is an opportunity to recognize the long-term benefit of these assets to the electricity system and "bring forward" that benefit for ratepayers today by deferring some of the current costs.

To relieve the current burden on ratepayers and share costs more fairly, a portion of the Global Adjustment (GA) is being refinanced. Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built.

In the early years, a portion of the costs covered by the GA is being refinanced to reduce pressure on today's electricity ratepayers. In later years, the cost of refinancing will be recovered from ratepayers.

OFHP is delivering the single-largest reduction in electricity rates in the Province's history. In developing OFHP, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and ensures the goals underlying the program are achieved in a cost-effective manner.

The government recognizes that a fiscally sound approach to managing the Province's finances will provide the foundation for the long-term well-being and prosperity of Ontarians, and protect the public services that Ontarians rely on.

For further questions related to Ontario's Fair Hydro Plan, please contact the Ministry of Energy.

Asset Sales

Q. Will you buy back Hydro One so that it is back under public control?

Maximizing the value of designated assets is part of the government's economic plan for Ontario. The net revenue gains from these transactions are helping the government to deliver on its plan by investing in infrastructure.

---

[44] Ministry of Energy, *2017 Long-Term Energy Plan*

The Trillium Trust Act, 2014, provides for the dedication to the Trillium Trust of net revenue gains associated with the sale of designated assets to support investments in transit, transportation and other priority infrastructure across the province.

The Province has also committed to using the cash amount of the proceeds related to the book value of the Hydro One shares sold to pay down the Province's electricity sector debt and other payables, helping to reduce the debt of the Ontario Electricity Financial Corporation (OEFC), which manages and pays down the debt and other liabilities of the former Ontario Hydro.

The government is on track to generate, over time, $4 billion[45] in net revenue gains to be invested in transit and infrastructure, along with $5 billion[46] to reduce debt, from broadening Hydro One's ownership.

The government will remain, by law, the largest single shareholder in Hydro One, restricting the Province from selling down to less than 40%[47] of the voting securities in Hydro One – and no other single shareholder or group of shareholders working in concert will be permitted to hold more than 10%[48] of the company's shares.

[45] Ontario Financing Authority
[46] Ontario Financing Authority
[47] Ontario Financing Authority
[48] Ontario Financing Authority

FW_ For Review - OPG OFHP Tech Briefing QA.pdf

From: Lightbody, Ava (ENERGY)
To: Thiru, Dhil (ENERGY)
Cc: Cayley, Daniel (ENERGY); DeSouza, Avril (ENERGY)
Subject: FW: For Review - OPG OFHP Tech Briefing QA
Date: January 24, 2018 4:28:20 PM
Attachments: QA - OPG OFHP Debt FinancingTech Briefing - AH - 20180122 KMs added - EPE.docx

---

Hi Dhil,

Please find attached our edited QAs for the OPG FHP technical briefing.

Thanks,
Ava

From: Thiru, Dhil (ENERGY)
Sent: January-17-18 11:32 AM
To: Cayley, Daniel (ENERGY)
Cc: Christie, Tim (ENERGY); DeSouza, Avril (ENERGY); Lightbody, Ava (ENERGY); Pinheiro, Alex (ENERGY)
Subject: FW: For Review - OPG OFHP Tech Briefing QA

Hi Daniel,

Attached is a QA for the Minister's upcoming OPG OFHP Technical briefing. DMO has shared this note with ESP only so kindly let me know if you believe other divisions would need to be involved. Kindly return to me by EOD Wednesday January 24.

Thanks.

From: Hendy, Adam (ENERGY)
Sent: January-17-18 11:04 AM
To: Thiru, Dhil (ENERGY)
Cc: Cox, Hilary (ENERGY); @ENERGY-COMM-Issues_and_MediaRelations; Berg, Denna (ENERGY); Lyon, Sam (ENERGY)
Subject: For Review - OPG OFHP Tech Briefing QA

Hey Dhil,

Attached for review is a QA we have put together for the Minister's use at the upcoming OPG OFHP Technical Briefing. This is simply a refresh/updated version of the QA we used for the October tech briefing on the OAG's special report on the OFHP.

In the doc you will notice tracked X's as placeholders, these are in place of dollar figures that are likely to change when we know OPG's interest rate. Please feel free to change any numbers in the doc where appropriate.

Hoping we can get this back by Jan 25 at noon, or whenever the numbers become available to you.

Thanks,
Adam

QA - OPG OFHP Debt FinancingTech Briefing - A_3.pdf

CONFIDENTIAL

Jan 22, 2017

KEY MESSAGES

- **Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history.**

- **OFHP has ~~introduced new measures to lower~~lowered electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.**

- **Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).**

- **OPG currently manages approximately $20 billion[1] in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts**

- **OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments.**

- ~~**Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates.**~~

- **The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.**

[1] Ontario Financing Authority

Q&As – OFHP Debt Financing

Q. Why did the government introduce the Ontario Fair Hydro Plan?

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly $70 billion[2] has been invested in the electricity system, including more than $37[3] billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP ~~has introduced new measures to~~ lowered electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

In developing the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. What is ~~the~~ Global Adjustment (GA)?

~~The~~ Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. ~~The~~ GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also ~~accounts for~~recovers costs associated with running conservation programs in the province.

GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a reliable supply of electricity.

GA pays for the bulk of the recent investments in the electricity system. The majority of the province's electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that generating assets are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets.

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

[2] Ministry of Energy, *2017 Long-Term Energy Plan*
[3] Ministry of Energy, *2017 Long-Term Energy Plan*

Q. Has the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? How much is the program expected to cost?

Ontario Power Generation (OPG) has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than original estimates.

Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[4]. The preliminary estimate from March 2017 was about $28 billion[5].

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty-~~-~~year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions. ~~The total estimated cost of the program has already been revised downwards substantially to reflect revised inputs.~~

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $27.7~~X~~ billion[6] to approximately $20 billion[7]. These estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as FSM and assume a 5% interest rate.

Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro ~~Act~~Plan? Would it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?

Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).

OPG currently manages approximately $20 billion[8] in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.

OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

OPG has developed solid investor relationships and has a large investor base in the structured finance space that would be the target market for financing Ontario's Fair Hydro Plan initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors[9], including major investors in the Canadian power and utility bonds market.

[4] Ministry of Energy
[5] Ministry of Energy, submission to Financial Accountability Officer
[6] Ministry of Energy
[7] Ministry of Energy
[8] Ontario Financing Authority
[9] Ontario Power Generation

In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than $2 billion[10] and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

Q. Some say you are unfairly placing the burden of debt on future generations through things like Ontario's Fair Hydro Plan, how do you respond?

Future generations will be paying their fair share for a system they will be benefiting from in their lifetime. Not only will they benefit from a reliable electricity system, but also from ~~the~~ cleaner air resulting from the elimination of ~~from the reduction of~~ coal-fired generation.

Ontario's Fair Hydro Plan (OFHP) acts much like taking out a new mortgage – providing much-needed relief now by spreading costs across the life of our assets. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Moving forward, Ontario's 2017 Long-Term Energy Plan (2017 LTEP) focuses on continuing to put downward pressure on electricity bills over the long term. Our robust electricity supply puts us in a good position to improve efficiency, increase transparency and enhance opportunities for innovation and competition to further reduce system costs. That is why Ontario's Fair Hydro Plan includes a commitment to improving sector efficiency and modernizing Ontario's electricity market, building on the collaboration of the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).

For example, IESO's Market Renewal initiative will result in a more efficient marketplace with competitive and transparent mechanisms that meet future system needs at the lowest cost. The initiative is expected to save up to $5.2 billion[11] over a 10-year period and forms a key component of Ontario's plan to ensure the affordability of electricity in the longer term.

Q. Who was involved in the policy and implementation process to meet the mandate?

Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.

The senior officials and staff were from:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

[10] Ontario Power Generation
[11] Independent Electricity System Operator, *Assessment of the Benefits of Market Renewal (Brattle Group)*

In development and implementation of Global Adjustment (GA) refinancing, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

Auditor General and Financial Accountability Office reports

Q. The Auditor General and the Financial Accountability Office both suggest that the cost of borrowing will be more expensive than traditional government borrowing? Is this true?

In the development of Ontario's Fair Hydro Plan (OFHP), the government made the policy decision that deferred electricity system costs should be borne by the rate-base and not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible consumers.

Ontario Power Generation (OPG) was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro Plan Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner.

OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

With respect to the $4 billion[12] figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be ~~below~~ approximately $~~20~~ 20X billion[13]. The preliminary estimate from March 2017 was about $28 billion[14].

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions. ~~The total estimated cost of the program has already been revised downwards substantially to reflect revised inputs.~~

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

[12] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*
[13] Ministry of Energy
[14] Ministry of Energy, submission to Financial Accountability Officer

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $27.7~~27.7~~X billion[15] to approximately ~~-~~$~~18.5~~X20 billion[16]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as FSM and assume a 5% interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 ~~25~~ ~~X~~billion[17] to less than $19~~18~~ ~~X~~ billion[18].

Q. Has~~ve~~ the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? I understand that the Office of the Audit General (OAG) has asked what are the factors that resulted in the changes in estimates from March 1 to August 31?

With respect to the $4 billion[19] figure referenced by the Financial Accountability Office (FAO) in its May 2017, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be ~~below~~ approximately $20~~20~~ ~~x~~ billion[20]. The preliminary estimate from March 2017 was about $28 billion[21].

The revised estimates are the result of ~~the following~~a number of factors, including updated long-term cost projections for the electricity system and residential bills provided by the Independent Electricity System Operator (IESO).~~:~~

- ~~The Independent Electricity System Operator (IESO) updated its long-term cost projections for the electricity system and residential bills;~~
- ~~The Ontario Energy Board (OEB) provided "actual data" with respect to residential bills for the May 1, 2017 to April 30, 2018 period; and~~
- ~~Based on expert third-party advice the interest rate assumptions for OFHP were updated (i.e., from 5%[22] down to 4.5%[23]).~~

[15] Ministry of Energy
[16] Ministry of Energy
[17] Ministry of Energy
[18] Ministry of Energy
[19] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*
[20] Ministry of Energy
[21] Ministry of Energy, submission to Financial Accountability Officer
~~[22] Ministry of Energy~~
~~[23] Navigant Consulting, *Assessment of the Alignment of the Costs and Benefits of Clean Energy Assets*~~

~~In addition, for the August 31, 2017 estimate, the Ministry of Energy converted debt and interest amounts from calendar year to Regulated Price Plan (RPP) periods.~~

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions. ~~The total estimated cost of the program has already been revised downwards substantially to reflect revised inputs.~~

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $27.7 billion[24] to approximately $~~18.5~~~~X~~20 billion[25]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as FSM and assume a 5% interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 ~~X~~ billion[26] to less than $1~~8~~9 ~~X~~ billion[27].

Q. In the development of Ontario's Fair Hydro Plan, did the government set up the financing structure intentionally to keep it off government books?

No. ~~Global Adjustment (~~GA~~)~~ refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

GA refinancing operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

~~**Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro Act? Would it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?**~~

~~Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).~~

---

[24] Ministry of Energy
[25] Ministry of Energy
~~[26] Ministry of Energy~~
~~[27] Ministry of Energy~~

~~OPG currently manages approximately $20 billion[28] in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.~~

~~OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization program and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.~~

~~OPG has developed solid investor relationships and has a large investor base in the structured finance space that would be the target market for financing Ontario's Fair Hydro Plan initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors[29], including major investors in the Canadian power and utility bonds market.~~

~~In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than $2 billion[30] and two commercial paper programs.~~

~~Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.~~

Q. ~~What does this mean for the~~How do you respond to the Financial Accountability Office's (FAO) suggestion from May 2017 that using Ontario Power Generation as the borrowing agent will cost $4 billion more? Why not have the Province borrow for the OFHP?

The policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets. Therefore, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the ratebase~~payers~~ – not the tax-base.

We believe it is appropriate for ratepayers to pay for the financing of electricity assets. The rate-base has a different risk profile than the tax-base, which would be reflected in different interest costs. Having the rate-base pay is not a new policy, for example Hydro One has borrowed in the capital markets since the early 2000s[31].

Commented [AL1]: Moved up from below question (see highlighted comment), amalgamated hereto reduce repetition

The $4 billion figure was an estimate made by the Financial Accountability Office (FAO) based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak

~~[28] Ontario Financing Authority~~
~~[29] Ontario Power Generation~~
~~[30] Ontario Power Generation~~
[31] Ministry of Finance

debt over the thirty year life of OFHP will be ~~below~~ approximately $~~20~~ ~~X~~20 billion[32]. The preliminary estimate from March 2017 was about $28 billion[33].

The FAO report itself concludes by saying "the FAO's estimates are subject to many assumptions and uncertainties (…) Fiscal impact may differ significantly from the FAO's estimates."

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $27.7 billion[34]to approximately $~~18.5~~X ~~20~~ billion[35]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as FSM and assume a 5% interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 billion[36] to less than $19~~8~~ billion[37].

Q. Do you disagree with the FAO on financial costs?

With respect to the $4 billion[38] figure referenced by the Financial Accountability Office (FAO) in its May 2017, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty-~~-~~year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be ~~below~~ approximately $~~20~~ ~~X~~ 20 billion[39]. The preliminary estimate from March 2017 was about $28 billion[40].

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions. ~~The total estimated cost of the program has already been revised downwards substantially to reflect revised inputs.~~

---

32 Ministry of Energy
33 Ministry of Energy, submission to Financial Accountability Officer
34 Ministry of Energy
35 Ministry of Energy
~~36 Ministry of Energy~~
~~37 Ministry of Energy~~
38 Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*
39 Ministry of Energy
40 Ministry of Energy, submission to Financial Accountability Officer

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program. ~~Further details will be released in the 2017 Long-Term Energy Plan (2017 LTEP), which will be released on October 26, 2017.~~

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $27.7 billion[41] to approximately $~~18.5X~~20 billion[42]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as FSM and assume a 5% interest rate.

If pressed on interest costs:

The Ministry estimates of total interest cost also decreased from $25 billion[43] to less than $1~~8~~9 billion[44].

~~**Q. The OAG's report claims that consumers will pay an additional $4 billion in interest costs over the life of OFHP since OPG and its Financing Entity will pay a higher rate of interest compared to the Province. Why not have the Province borrow for the OFHP?**~~

Commented [AL2]: Amalgamated into above Q on 4 bill for succinctness

~~The policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets. Therefore, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the ratepayers – not the tax-base.~~

~~We believe it is appropriate for ratepayers to pay for the financing of electricity assets. The rate-base has a different risk profile than the tax-base, which would be reflected in different interest costs. Having the rate-base pay is not a new policy, for example Hydro One has borrowed in the capital markets since the early 2000s[45].~~

~~The $4 billion[46] figure in the Office of the Auditor General's report was sourced from the FAO's May 2017 report and is important to note, that the FAO's calculation was based on preliminary estimates of the program when peak debt estimates for the thirty year program were substantially higher and interest costs were forecast to be higher than current projections.~~

~~**Q. What is the Global Adjustment (GA)?**~~

~~The Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. The GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the~~

---

[41] Ministry of Energy
[42] Ministry of Energy
~~[43] Ministry of Energy~~
~~[44] Ministry of Energy~~
~~[45] Ministry of Finance~~
~~[46] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*~~

~~marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also accounts for costs associated with running conservation programs in the province.~~

~~GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a reliable supply of electricity.~~

~~GA pays for the bulk of the recent investments in the electricity system. The majority of the province's electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that generating assets are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets.~~

~~Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.~~

~~Q. Some say you are unfairly placing the burden of debt on future generations through things like Ontario's Fair Hydro Plan, how do you respond?~~

~~Future generations will be paying their fair share for a system they will be benefiting from in their lifetime. Not only will they benefit from a reliable electricity system, but from the cleaner air from the reduction of coal-fired generation.~~

~~Ontario's Fair Hydro Plan (OFHP) acts much like taking out a new mortgage – providing much-needed relief now by spreading costs across the life of our assets. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.~~

~~Moving forward, Ontario's 2017 Long-Term Energy Plan (2017 LTEP) focuses on continuing to put downward pressure on electricity bills over the long term. Our robust electricity supply puts us in a good position to improve efficiency, increase transparency and enhance opportunities for innovation and competition to further reduce system costs. That is why Ontario's Fair Hydro Plan includes a commitment to improving sector efficiency and modernizing Ontario's electricity market, building on the collaboration of the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).~~

~~For example, IESO's Market Renewal initiative will result in a more efficient marketplace with competitive and transparent mechanisms that meet future system needs at the lowest cost. The initiative is expected to save up to $5.2 billion[47] over a 10-year period and forms a key component of Ontario's plan to ensure the affordability of electricity in the longer term.~~

~~Q. Who was involved in the policy and implementation process to meet the mandate?~~

~~[47] Independent Electricity System Operator, *Assessment of the Benefits of Market Renewal (Brattle Group)*~~

~~Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.~~

~~The senior officials and staff were from:~~

- ~~Ministry of Energy;~~
- ~~Ministry of Finance;~~
- ~~Treasury Board Secretariat;~~
- ~~Office of the Provincial Controller;~~
- ~~Cabinet Office;~~
- ~~Ontario Financing Authority (OFA);~~
- ~~Independent Electricity System Operator (IESO); and~~
- ~~Ontario Power Generation Inc. (OPG).~~

~~In development and implementation of Global Adjustment (GA) refinancing, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.~~

~~Document Search~~

~~Q. Why has the Ministry of Energy not provided all e-mails requested by the Auditor General?~~

~~As of October 13, 2017, the Ministry has provided 13,212 emails and attachments to the OAG's office.~~

~~Q. How much money did the Ministry spend on lawyers?~~

~~The Ministry does not intend to spend more than $60,000 on this request. Although the retainer agreement includes a cap of up to $500,000, as of September 21, 2017, only $41,775.75 has actually been spent.~~

~~Q. What was the Ministry of Energy's process for providing the emails requested by the Auditor General?~~

~~The Ministry conducted a search consistent with the 40 plus search terms provided to the AG. In order to manage the approximately 2.2 million records resulted from the search of 81 custodians, the Ministry of Energy has selected McCarthys/Wortzmans to assist with processing and analysis of the documents. No legal advice on relevancy of documents was provided by Wortzmans. The Ministry has been regularly providing AG batches of responsive documents.~~

Commented [AL3]: Suggest removing this level of detail on AG process in this context

Reasoning for Accounting Approach

Q. How do you respond to the Auditor General's claim that the government ignored warnings regarding a potential adverse audit opinion of Ontario's public accounts?

The government's financial statements are prepared in accordance with Public Sector Accounting Standards (PSAS), and will continue to follow these standards for the transactions resulting from Ontario's Fair Hydro Plan (OFHP) in 2017-18 and in future years.

In regards to rate-regulated accounting, PSAS are silent on the use of regulated accounting:

- PSAS acknowledges that it does not provide guidance on all possible transactions and notes that it is necessary to refer to other sources of guidance that are consistent with the PSAS framework; and
- US GAAP, with the most developed guidance on rate-regulated accounting, is the appropriate guidance to reference.

Many entities in Canada, including OPG and Hydro One use rate-regulated accounting:

- The OAG can refer to the CPA Canada research study that was shared.
- Rate-regulated accounting is well understood in the electricity sector.
- The recognition of regulatory assets brings IESO in line with 6 other independent system operators in North America, including AESO, ISO New England, NYISO, MISO, PJM and ERCOT.

The IESO management, IESO's Audit Committee, IESO's Board of Directors, IESO's external auditor and the Office of the Provincial Controller all support the use of rate-regulated accounting by IESO.

In the development of OFHP, the government consulted with several third party advisors in the application of accounting standards. This is normal course of business governments take for complex transactions.

~~TBS's Detailed QAs re Ontario's Fair Hydro Plan~~

Commented [AL4]: Suggest removing TBS questions

~~Q. The Auditor General says that the accounting structure for Ontario's Fair Hydro Plan is not transparent, has poor value for money, and is not in accordance with Public Sector Accounting Standards. How do you respond?~~

~~The government has the utmost respect for all independent officers of the legislature, and values the important perspective they bring.~~

~~The Ministry of Energy, the Ministry of Finance, and the Treasury Board Secretariat remain committed to assisting the Office of the Auditor General so that it can provide its independent views to the Legislative Assembly.~~

~~With regards to the Auditor General's report on Ontario's Fair Hydro Plan (OFHP) – while the government does not agree with the assertions and conclusions expressed in the report, the government thanks the Office of the Auditor General for its report.~~

~~OFHP is delivering the single-largest reduction in electricity rates in the Province's history. In developing OFHP, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.~~

~~OFHP operates under a financial and accounting framework that is appropriate for the intended purpose. It is in accordance with Public Sector Accounting Standards (PSAS) and ensures the goals underlying the program are achieved in a cost-effective manner.~~

~~The implementation of OFHP is ongoing, with significant decisions with accounting and financial implications still being finalized.~~

~~The Province's financial statements are prepared in accordance with Canadian PSAS and will follow PSAS in accounting for the transactions resulting from OFHP in 2017-18, and in following years.~~

~~As PSAS is set by an independent standard-setting body in Canada focused specifically on the public sector, and because PSAS is used by all senior governments in Canada, presenting financial statements in accordance with PSAS results is transparent financial reporting for the Province of Ontario.~~

~~Ontario has a strong track record of producing high-quality financial reports on a timely basis, and will continue to move forward and present the Province's finances fairly, accurately and in accordance with PSAS.~~

~~The Ministry of Energy would welcome further questions about OFHP and the government's investments in a reliable energy system.~~

Commented [AL5]: Moved these statements in a few places since this set of QAs is being prepared for the Minister

~~Q. The Auditor General makes two recommendations in her report – to record the true financial impact of Ontario's Fair Hydro Plan; and to use a financing structure that is the least costly for Ontarians. Will you adopt these recommendations?~~

~~The government does not agree with the assertions and conclusions expressed in the report.~~

~~In developing OFHP, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.~~

~~OFHP operates under a financial and accounting framework that is appropriate for the intended purpose. It is in accordance with Public Sector Accounting Standards (PSAS) and ensures the goals underlying the program are achieved in a cost-effective manner.~~

~~In order to meet the needs of users, including the legislature and the public, for accountability in government reporting and decision making, it is essential that public sector financial statements reflect the economic substance of the government's activities.~~

~~The Province's financial statements are prepared in accordance with Canadian PSAS and will follow PSAS in accounting for the transactions resulting from OFHP in 2017-18, and in following years.~~

~~As PSAS is set by an independent standard-setting body in Canada focused specifically on the public sector, and because PSAS is used by all senior governments in Canada, presenting financial statements in accordance with PSAS results in transparent financial reporting for the Province of Ontario.~~

~~Ontario has a strong track record of producing high-quality financial reports on a timely basis, and will continue to move forward and present the Province's finances fairly, accurately and in accordance with PSAS.~~

~~The OFHP financing structure has been designed to provide electricity rate relief to current ratepayers, including by more fairly allocating costs for specified consumers, with the Global Adjustment cost amounts still ultimately borne by specified electricity ratepayers, as beneficiaries of those electricity system costs.~~

~~Ontario Power Generation (OPG) is beginning the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than the estimates in the May 2017 report of the Financial Accountability Office (FAO).~~

~~Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be below $20 X billion[48]. The preliminary estimate from March 2017 was about $28 billion[49].~~

~~The Province will continue to prepare its consolidated financial statements in accordance with PSAS and continue to build on a track record of responsible fiscal management.~~

~~[48] Ministry of Energy~~
~~[49] Ministry of Energy, submission to Financial Accountability Officer~~

~~Q. Both the Auditor General and the Financial Accountability Officer (FAO) have raised serious concerns about the accounting treatment of the electricity cost refinancing initiative. Why should Ontarians believe this government over two independent officers of the Legislature?~~

~~The government has the utmost respect for all independent officers of the legislature, and values the important perspective they bring.~~

~~Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the Province's history.~~

~~In developing OFHP, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.~~

~~OFHP operates under a financial and accounting framework that is appropriate for the intended purpose. It is in accordance with Public Sector Accounting Standards (PSAS) and ensures the goals underlying the program are achieved in a cost-effective manner.~~

~~The Province, as always, will prepare its consolidated financial statements in accordance with PSAS and continue to build on its track record of responsible fiscal management.~~

~~Q. The Auditor General says that you are "obfuscating" the true financial impact of Ontario's Fair Hydro Plan through a "needlessly complex" accounting structure. How do you respond?~~

~~Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the Province's history. In developing OFHP, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.~~

~~OFHP operates under a financial and accounting framework that is appropriate for the intended purpose. It is in accordance with Public Sector Accounting Standards (PSAS) and ensures the goals underlying the program are achieved in a cost-effective manner.~~

~~OFHP is comprised of a series of policy decisions. The impact of some of these decisions will be borne by the Province (taxpayers) where appropriate, such as sales tax relief and shifting social programs to the tax base; some will be borne by ratepayers, such as spreading the investment costs and benefits across ratepayers more fairly.~~

~~While the implementation of OFHP is ongoing, with significant decisions with accounting and financial implications still being finalized, the financing plan for OFHP and its impact will be transparent. Credit rating agencies, securities regulators, and the public will see full information and full reporting of the impacts of OFHP.~~

~~Ontario has a strong track record of producing high-quality financial reports on a timely basis. Ontario will continue to move forward and present the Province's finances fairly and accurately and in accordance with PSAS.~~

~~Q. How can you justify the $4 billion in additional interest expenses that will be borne by ratepayers because of the way the government has structured electricity cost refinancing (i.e. using Ontario Power Generation to finance 55 per cent, at a higher interest rate than the Province, instead of the Province financing the entire electricity cost financing)?~~

Commented [AL6]: Concept covered above

~~Ontario's Fair Hydro Plan (OFHP) is comprised of a series of policy decisions. The impact of some of these decisions will be borne by the Province (taxpayers) where appropriate, such as sales tax relief and shifting social programs to the tax base; some will be borne by ratepayers, such as spreading the investment costs and benefits across ratepayers more fairly.~~

~~The accounting will reflect the economic substance of the transactions in accordance with Public Sector Accounting Standards (PSAS) and will differentiate those costs of OFHP borne by taxpayers versus those borne by ratepayers.~~

~~The Auditor General's report suggests that all the costs of OFHP should be reflected as if they will be borne by taxpayers, which is inaccurate.~~

~~Ontario Power Generation (OPG) is beginning the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than the estimates in the May 2017 report of the Financial Accountability Officer (FAO).~~

~~Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be below $20~~ X ~~billion~~[50]~~. The preliminary estimate from March 2017 was about $28 billion~~[51]~~.~~

~~Q. The Auditor General said that a similar move to legislate accounting to defer costs was proposed with the restructuring of the Ontario electricity sector in the late 1990s, but the Auditor General's opinion at that time was that this would represent a departure from a central tenet of generally accepted accounting principles. The government at that time heard these concerns, and made the decision to not create an asset for future anticipated ratepayer payments. Why does the government think this is ok now?~~

~~The Auditor General's report makes a comparison between Ontario's Fair Hydro Plan (OFHP) and the Ontario Electricity Financial Corporation (OEFC) stranded debt. There are, however, crucial differences between the two.~~

~~For example, the OEFC stranded debt had already been incurred when the restructuring took place.~~

~~In the case of OFHP, the difference between what will be collected and what will be paid to generators is considered to be an asset in accordance with the accounting definition, as it will generate a specific future revenue stream in the form of the CEA.~~

~~[50] Ministry of Energy~~
~~[51] Ministry of Energy, submission to Financial Accountability Officer~~

~~It is important to note that the 1999 restructuring led to an "unbundling" of the electricity rate. Prior to the 1999 restructuring and the 2002 market opening, there was a "bundled rate" for electricity that included cost recovery of generation and transmission costs, operating and capital – including debt costs, as well as central market operations costs. Including debt cost recovery and matching the timing of the capital cost recovery with the benefit to the ratepayer is a normal rate-setting regulatory practice.~~

~~The Debt Retirement Charge (DRC) represented the unbundling of a portion of the debt service costs. It effectively amortized the cost of the investments in long-lived assets (including debt incurred).~~

~~OFHP's Global Adjustment (GA) deferral is also intended to have costs recovered from specified ratepayers over a time period that better reflects the expected lives of those assets (versus the contract lengths that may be shorter than the expected useful life of the assets).~~

~~The difference between the 1999 restructuring and OFHP is that the DRC continued to pay down, over time, debt that had already been incurred, while under OFHP, an asset is being recorded to reflect a fair allocation of electricity costs between current and future ratepayers.~~

~~The intention of OFHP is to be forward-looking, to ensure that ratepayers are sharing current and future costs, whereas the DRC was backward-looking, replacing part of a bundled rate that was already spreading the cost recovery of the debt over time.~~

~~Q. What will happen if interest rates rise? The Financial Accountability Officer (FAO) estimates that if interest rates were to rise, the true cost of Ontario's Fair Hydro Plan could be between $69 and $93 billion. How can you justify shifting this heavy burden onto future generations?~~

~~The implementation of Ontario's Fair Hydro Plan (OFHP) is ongoing, with significant decisions with accounting and financial implications still being finalized.~~

~~Ontario Power Generation (OPG) is beginning the process of raising funds to finance the deferred costs of OFHP, and while total borrowing costs will not be known until the program is complete, accumulated interest is expected to be considerably less than the estimates cited in the May 2017 report of the FAO.~~

~~Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report, and borrowing costs are now forecast to be substantially lower than original estimates.~~

~~Current government estimates forecast that the peak debt over the thirty year life of OFHP will be below $20 X billion[52]. The preliminary estimate from March 2017 was about $28 billion[53].~~

~~Government Officials~~

~~Q. The Auditor General says that even your own government officials flagged the unnecessarily high costs of Ontario's Fair Hydro Plan – and yet you chose to proceed. How can you justify this?~~

~~[52] Ministry of Energy~~
~~[53] Ministry of Energy, submission to Financial Accountability Officer~~

~~In developing Ontario's Fair Hydro Plan (OFHP), the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.~~

~~Multiple options were considered in creating the OFHP framework – such as to have local distribution companies finance the difference between the amounts paid to the generators and the amounts collected from the ratepayers. This was rejected because of the inability of some local distribution companies to finance the balances.~~

~~The implementation of OFHP is ongoing, with significant decisions with accounting and financial implications still being finalized.~~

~~Ultimately, OFHP operates under a financial and accounting framework that is appropriate for the intended purpose. It is in accordance with Public Sector Accounting Standards (PSAS) and ensures the goals underlying the program are achieved in a cost-effective manner.~~

~~Audit Opinion~~

~~The government just received another qualified audit opinion on its Public Accounts – this time based on two separate issues. Why do you continue to disagree with the Auditor General?~~

~~The government continues to move forward and present the Province's finances fairly and accurately and in accordance with Canadian Public Sector Accounting Standards (PSAS). Ontario has a strong track record of producing high-quality financial reports on a timely basis. The Auditor General's qualified opinion is based on a different interpretation of PSAS for net pension assets and recognition of market accounts.~~

~~Last year there was a disagreement among the Province's professional accounting staff and the Auditor General's Office on the appropriate application of PSAS regarding pension accounting. As a result, the Pension Asset Expert Advisory Panel was established to deliver independent advice and recommendations on the issue to the Province.~~

~~The independent panel members concluded the Province's share of the net pension assets of both the Ontario Teachers' Pension Plan and the Ontario Public Service Employees' Union Pension Plan should be recognized in Ontario's financial statements.~~

~~After significant deliberation, including consideration of the recommendations of the panel, Ontario confirmed that the accounting for these plans prior to 2015-16 was appropriate, and are prepared in accordance with public sector accounting standards for pension asset accounting. Further, EY provided additional analysis and concluded that no valuation allowance was required for either plan as of March 31, 2017. The 2016-17 financial statements include these pension assets, and we continue to apply the accounting treatment of pension assets that the Province has used consistently since 2001. In addition, the 2015-16 financial statements were restated to include these assets.~~

~~This year the Independent Electricity System Operator (IESO) began recognizing its market accounts' assets (amounts due from power distributors) and liabilities (amounts due to power producers) in its financial results. The IESO has chosen to recognize these markets accounts on its books for transparency reasons, as it better reflects the financial position of IESO-administered markets at year-end. This change was supported by IESO's audit committee, its independent external auditor, and finally by the Office of the Provincial Controller. This change also has no impact to the Province's annual deficit, net debt or accumulated deficit.~~

~~This accounting is consistent with the presentation used previously by the Ontario Power Authority (which was merged with IESO on January 1, 2015) in its financial statements, which was not subject to qualification from the Office of the Auditor General at that time.~~

~~Q. The Auditor General says that you anticipated the government would receive a qualified audit opinion – and accepted this risk. In the private sector this would be unacceptable. How do you figure you can get away with this?~~

~~The Province's financial statements are prepared in accordance with Canadian Public Sector Accounting Standards (PSAS).~~

~~As PSAS is set by an independent standard-setting body in Canada focused specifically on the public sector, and because PSAS is used by all senior governments in Canada, presenting financial statements in accordance with PSAS results in transparent financial reporting for the Province of Ontario.~~

~~PSAS are principle based -- they are not a set of specific prescriptive rules. Applying them requires the application of professional judgment.~~

~~Our professional staff exercises judgment in applying the standards and as necessary consult with external experts and advisors. They provide the Office of the Auditor General with their written analysis on all significant issues that impact the financial statements for the year being audited, and they discuss the issues with the Office of the Auditor General.~~

~~All Chartered Professional Accountants (CPAs), including those employed by the Ontario Public Service (OPS), are required to comply with the Code of Professional Conduct for CPAs. One of those rules is that they not be associated with false or misleading information.~~

~~That means that if the professional accountants in the OPS do not agree with the judgment of the Ontario Auditor General, it is not as simple as just agreeing to accept the interpretation of the Office of the Auditor General if they believe that interpretation would result in false or misleading financial statements. While we expect professional accountants to agree on the vast majority of issues, we acknowledge that they may not agree on everything and when that occurs, and the difference is material to the financial statements, the Office of the Auditor General can choose to issue a qualified audit opinion.~~

~~Q. Are you concerned that the Auditor General will issue an adverse opinion on the Province's Public Accounts due to Ontario's Fair Hydro Plan accounting? What would be the impact on the Province's credit rating?~~

~~It would be inappropriate to speculate about how the Auditor General may issue an opinion for Public Accounts next year. The implementation of Ontario's Fair Hydro Plan (OFHP) is ongoing, with significant decisions with accounting and financial implications still being finalized.~~

~~The Ministry of Energy, Finance and the Treasury Board Secretariat continue to work closely with Ontario Power Generation (OPG), the Independent Electricity System Operator (IESO) and third-party accounting, financing and energy experts to ensure due diligence.~~

~~The Province's financial statements are prepared in accordance with Canadian PSAS and will follow PSAS in accounting for the transactions resulting from OFHP in 2017-18, and in following years.~~

~~The financing plan for OFHP and its impact will be transparent. Credit rating agencies, securities regulators, and the public will see full information and full reporting of the impacts of OFHP.~~

~~Ontario has a strong track record of producing high-quality financial reports on a timely basis. Ontario will continue to move forward and present the Province's finances fairly and accurately and in accordance with PSAS.~~

~~Q. The Auditor General says that she has consulted with all of the Auditor Generals in Canada – and they agree with her assessments. How are we supposed to believe this government when all independent auditors in the country say you are wrong?~~

~~In developing Ontario's Fair Hydro Plan, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.~~

~~PSAS are principle based -- they are not a set of specific prescriptive rules. Applying them requires the application of professional judgment.~~

~~Our professional staff exercises judgment in applying the standards and as necessary consult with external experts and advisors. They provide the Office of the Auditor General with their written analysis on all significant issues that impact the financial statements for the year being audited, and they discuss the issues with the Office of the Auditor General.~~

~~All Chartered Professional Accountants (CPAs), including those employed by the Ontario Public Service (OPS), are required to comply with the Code of Professional Conduct for CPAs. One of those rules is that they not be associated with false or misleading information.~~

~~That means that if the professional accountants in the OPS do not agree with the judgment of the Ontario Auditor General, it is not as simple as just agreeing to accept the interpretation of the Office of the Auditor General if they believe that interpretation would result in false or misleading financial statements. While we expect professional accountants to agree on the vast majority of issues, we acknowledge that they may not agree on everything and when that occurs, and the difference is material to the financial statements, the Office of the Auditor General can choose to issue a qualified audit opinion.~~

~~Q. Are you going to hire an expert advisory panel, as you did on the pension asset accounting matter, to settle this dispute with the Auditor General? If so, what authority would this panel have?~~

~~There are no plans to establish a panel at this time.~~

~~In developing Ontario's Fair Hydro Plan (OFHP), the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.~~

~~The Province will continue to work with the Auditor General to build on the government's track record of responsible fiscal management and high quality financial reporting.~~

~~*Independent Electricity System Operator (IESO)*~~

~~**The Auditor General was critical of the Independent Electricity System Operator's accounting changes, which formed part of her basis for a qualified opinion in the 2016-17 Public Accounts. Are these accounting changes inappropriate?**~~

~~*On recognizing market accounts' assets:*~~

~~The Independent Electricity System Operator (IESO) began recognizing its market accounts' assets (amounts due from power distributors) and liabilities (amounts due to power producers) in its financial results. The IESO has chosen to recognize these markets accounts on its books for transparency reasons, as it better reflects its net financial position on behalf of the IESO-administered markets at year-end.~~

~~This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. These accounting changes were highlighted in the IESO's annual report which was published online in March 2017.~~

~~Further, this accounting is consistent with the presentation used previously by the Ontario Power Authority (which was merged with IESO on January 1, 2015) in its financial statements, which was not subject to qualification from the Office of the Auditor General (OAG) at that time.~~

~~This change has no impact to the Province's annual deficit, net debt or accumulated deficit.~~

~~This accounting change has been supported by the professional accounting staff of the Office of the Provincial Controller.~~

~~We will continue to work with the Auditor General to build on the government's track record of responsible fiscal management and high quality financial reporting.~~

~~*On rate-regulated accounting:*~~

~~The IESO made the decision to adopt rate-regulated accounting because it better reflects the economic substance of certain types of expenses that may not be directly recovered through the normal revenue requirement model.~~

~~The IESO, like Hydro One and Ontario Power Generation (OPG), is regulated by the Ontario Energy Board (OEB). The IESO adopted rate-regulated accounting for its year ended December 31, 2016. This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. These accounting changes were highlighted in IESO's annual report which was published online in March 2017.~~

~~*Rate-regulated Accounting*~~

~~**Q. Why use rate-regulated accounting? What is its benefit?**~~

~~In certain circumstances, an organization may be required to incur a large expenditure that will be recovered from ratepayers in the future.~~

~~For example, damage caused by an ice storm that results in extraordinary costs to restore a disruption of electricity services for customers. Such costs are subject to application and approval for recovery by the regulator over a specific time period.~~

~~What rate-regulated accounting does is it allows organizations to recognize those costs, which can be significant within a year but will generate benefits over time, to be matched over the same period that the amounts are recovered from ratepayers.~~

~~**Q. The Auditor General says that the Independent Electricity System Operator's decision to adopt rate-regulated accounting was a deviation from Public Sector Accounting Standards, and cautioned against its use in her Independent Auditor's Report. Why was this change made and was it appropriate?**~~

~~Canadian Public Sector Accounting Standards (PSAS) are effectively silent on this issue – they neither explicitly permit, nor prohibit, the recognition, measurement, presentation, or disclosure of rate-regulated activities.~~

~~In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards.~~

~~Paragraph 11 of the *Introduction to Public Sector Accounting Standards* ("Introduction") states: "When applying the CPA Canadian Public Sector Accounting (PSA) Handbook, where the standards are silent on an issue, public sector entities should apply Generally Accepted Accounting Principles (GAAP), Section PS 1150."~~

~~In this case, the Independent Electricity System Operator (IESO) consulted U.S. Generally Accepted Accounting Principles (GAAP), the appropriate accounting framework in North America that provides guidance on rate-regulated operations.~~

~~The IESO made the decision to adopt rate-regulated accounting because it better reflects the economic substance of certain types of expenses that may not be directly recovered through the normal revenue requirement model.~~

~~The IESO, like Hydro One and Ontario Power Generation (OPG), is regulated by the Ontario Energy Board (OEB). The IESO adopted rate-regulated accounting for its year ended December 31, 2016. This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. These accounting changes were highlighted in IESO's annual report which was published online in March 2017.~~

~~It is worth noting that currently 8 out of 9 electricity system operators in North American markets employ accounting for rate-regulated assets, including IESO.~~

~~**Q. The Auditor General says that the use of rate-regulated accounting is inappropriate for the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB) according to U.S. Generally Accepted Accounting Principles. How do you respond?**~~

~~In commenting on the use of rate-regulated accounting and the role of the Ontario Energy Board (OEB), the Auditor General's report makes reference to a requirement under U.S. accounting standards in connection with the use of rate-regulated accounting that "there must an independent regulator." This reference is misleading as it does not provide the criteria in its entirety, which is as follows:~~

~~*"The entity's rates for regulated services or products provided to its customers are established by or are subject to approval by an independent, third-party regulator **or by its own governing board empowered by statute or contract to establish rates that bind customers"** [ASC 980-10-15-2].*~~

~~The U.S. accounting standard was developed specifically to not preclude the application of rate-regulated accounting by government utilities where the rate regulator would not necessarily be viewed as independent (FAS 71, par. 64).~~

~~In addition, the position that rate-regulated accounting is precluded because the OEB is not considered independent of the government of Ontario is contradictory to accepting the use of rate-regulated accounting by Ontario Power Generation (OPG) and Hydro One – both of which are regulated by the OEB and whose results, using rate-regulated accounting, are and have been included in the consolidated financial statements of the Province.~~

~~*IESO Response:*~~

~~Canadian Public Sector Accounting Standards (PSAS) are effectively silent on this issue – they neither explicitly permit, nor prohibit, the recognition, measurement, presentation, or disclosure of rate-regulated activities.~~

~~In the absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards.~~

~~In this case, the Independent Electricity System Operator (IESO) consulted U.S. Generally Accepted Accounting Principles (GAAP), the appropriate accounting framework in North America that provides guidance on rate-regulated operations.~~

~~*Legislated Accounting*~~

~~**Q. The Auditor General says that you are essentially making up your own accounting rules. How are Ontarians supposed to believe things like a "balanced budget" when you keep changing the rules?**~~

~~The *Ontario Fair Hydro Plan Act, 2017* and its related regulations **do not** create accounting rules or legislate the accounting. This is a fundamental disagreement the government has with the Auditor General's report.~~

~~The OFHP operates under a financial and accounting framework that is appropriate for its intended purpose. It is in accordance with Public Sector Accounting Standards (PSAS) and ensures the goals underlying the program are achieved in a cost-effective manner.~~

~~The Province, as always, will prepare its consolidated financial statements in accordance with Public Sector Accounting Standards (PSAS). The recording of any asset resulting from transactions of OFHP will be assessed for recognition and measurement based on PSAS, and where appropriate, other accounting guidance where PSAS is silent on the issue.~~

~~**Q. Why did the IESO change its accounting practices?**~~

~~The Independent Electricity System Operator (IESO) began recognizing its market accounts' assets (i.e., amounts due from power distributors) and liabilities (i.e., amounts due to power producers) in their financial results.~~

~~This accounting change was accepted by IESO's independent external auditor, which issued an unqualified, or "clean," audit opinion. These accounting changes were highlighted in IESO's 2016 annual report, which was published online in March 2017.~~

~~The IESO has chosen to recognize these markets accounts on its books for transparency reasons, as it better reflects its net financial position on behalf of IESO-administered markets at year-end.~~

~~Further, this accounting is consistent with the presentation used previously by the Ontario Power Authority (which was merged with IESO on January 1, 2015) in its financial statements.~~

~~Additionally this accounting change has been supported by the professional accounting staff of the Office of the Provincial Controller.~~

~~This change has no impact to the province's annual deficit, net debt, accumulated deficit or on the ratepayers of Ontario.~~

~~We will continue to work with the Auditor General to build on the government's track record of responsible fiscal management and high quality financial reporting.~~

~~Q. Why did the government not use the Canadian Public Sector Accounting Standards (PSAS)? How was Ontario's Fair Hydro Plan (OFHP) financing structure determined?~~

~~The Province's financial statements are prepared in accordance with Canadian PSAS and will follow PSAS in accounting for the transactions resulting from OFHP in 2017-18 as well as in the following years. Presenting its financial statements in accordance with PSAS results in transparent financial reporting for the Province of Ontario.~~

~~PSAS is, however, silent on the recognition, measurement, presentation or disclosure of rate-regulated activities. In absence of a clear position on an issue, standard accounting practice dictates that an entity should consult other accounting standards. In this case, the Independent Electricity System Operator (IESO) consulted US GAAP, the accounting framework in North America that provides the most developed guidance on rate regulated operations.~~

~~This financing structure is similar to several jurisdictions in the U.S., and uses a form or securitization that is commonly used in the financial markets. It ensures the impact of the plan will be transparent. Under this system, credit rating agencies, securities regulators and the public at large get full information and full reporting of the impacts of the OFHP that are visible and specific.~~

~~Q. The Auditor General says that the Province legislated accounting through the Ontario Fair Hydro Plan Act, which is not allowed according to Public Sector Accounting Standards (PSAS). Is this true?~~

~~The *Ontario Fair Hydro Plan Act, 2017* and its related regulations **do not** create accounting rules or legislate the accounting. This is a fundamental disagreement the government has with the Auditor General's report.~~

~~The Province, as always, will prepare its consolidated financial statements in accordance with Public Sector Accounting Standards (PSAS).~~

~~As PSAS is set by an independent standard-setting body in Canada focused specifically on the public sector, and because PSAS is used by all senior governments in Canada, presenting financial statements in accordance with PSAS results in transparent financial reporting for the Province of Ontario.~~

~~PSAS are principle based – they are not a set of specific prescriptive rules. Applying them requires the application of professional judgment.~~

~~Our professional staff exercises judgment in applying the standards and as necessary consult with external experts and advisors. They provide the Office of the Auditor General with their written analysis on all significant issues that impact the financial statements for the year being audited, and they discuss the issues with the Office of the Auditor General.~~

~~The role of the Ontario Energy Board (OEB) and its mandate is provided in legislation. It is not uncommon for government policy, through regulations, to provide the ground rules over which the OEB is to preside.~~

~~This is the case with Ontario's Fair Hydro Plan (OFHP) itself, as the Act and the various regulations provide the direction and processes over which the OEB is to exercise oversight, review, and make conclusion on submissions brought forward.~~

~~Relationship with the Office of the Auditor General~~

~~Q. The Auditor General alleges the government withheld information from her on the accounting treatment for Ontario's Fair Hydro Plan. Why would she say that?~~

~~The government is committed to assisting the Office of the Auditor General so that it can provide its independent views to the Legislative Assembly.~~

~~The implementation of Ontario's Fair Hydro Plan is ongoing, with significant accounting and financial decisions still being finalized.~~

~~Senior ministry officials have met and continue to work with the Office of the Auditor General by participating in interviews and providing documentation.~~

~~If pressed:~~

~~The Auditor General was informed throughout the course of this process.~~

~~If asked about the Ministry of Energy emails:~~

~~The Ministry of Energy, Finance, and the Treasury Board Secretariat are committed to assisting the Auditor General. For questions related to the Ministry of Energy, please contact them directly.~~

~~Future Governments~~

~~Q. The Auditor General says that you are essentially handcuffing future governments with your financing structure. Why should future governments have to pay for your decisions?~~

~~By responsibly managing the Province's finances, Ontario balanced the budget in 2017-18, and will maintain a balanced budget for the future.~~

~~With a growing economy and a balanced budget, this is the time to make investments in key services that matter most to people, like health care and education, while at the same time lowering costs for necessities like electricity and child care.~~

~~Over the last decade government policies have supported rebuilding the electricity transmission and distribution grid, invested in clean generation, and closed the last coal-fired power plant. Prices have increased because our electricity system is being transformed – more than $70 billion[54] has been invested to modernize the system.~~

~~The government heard from people across the Province that the price of electricity had risen too quickly, which is why Ontario's Fair Hydro Plan (OFHP) will ensure costs are shared more fairly over the years ahead.~~

~~The Ontario electricity sector invested in renewing the provincial electricity system, including many new generating facilities, most of which operate under 20-year contracts. Some of these generators are expected to provide value to the electricity system beyond their contract lives. There is an opportunity to recognize the long-term benefit of these assets to the electricity system and "bring forward" that benefit for ratepayers today by deferring some of the current costs.~~

~~To relieve the current burden on ratepayers and share costs more fairly, a portion of the Global Adjustment (GA) is being refinanced. Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built.~~

~~In the early years, a portion of the costs covered by the GA is being refinanced to reduce pressure on today's electricity ratepayers. In later years, the cost of refinancing will be recovered from ratepayers.~~

~~OFHP is delivering the single-largest reduction in electricity rates in the Province's history. In developing OFHP, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.~~

~~OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and ensures the goals underlying the program are achieved in a cost-effective manner.~~

~~The government recognizes that a fiscally sound approach to managing the Province's finances will provide the foundation for the long-term well-being and prosperity of Ontarians, and protect the public services that Ontarians rely on.~~

~~For further questions related to Ontario's Fair Hydro Plan, please contact the Ministry of Energy.~~

~~Asset Sales~~

~~Q. Will you buy back Hydro One so that it is back under public control?~~

~~Maximizing the value of designated assets is part of the government's economic plan for Ontario. The net revenue gains from these transactions are helping the government to deliver on its plan by investing in infrastructure.~~

~~[54] Ministry of Energy, *2017 Long-Term Energy Plan*~~

~~The Trillium Trust Act, 2014, provides for the dedication to the Trillium Trust of net revenue gains associated with the sale of designated assets to support investments in transit, transportation and other priority infrastructure across the province.~~

~~The Province has also committed to using the cash amount of the proceeds related to the book value of the Hydro One shares sold to pay down the Province's electricity sector debt and other payables, helping to reduce the debt of the Ontario Electricity Financial Corporation (OEFC), which manages and pays down the debt and other liabilities of the former Ontario Hydro.~~

~~The government is on track to generate, over time, $4 billion[55] in net revenue gains to be invested in transit and infrastructure, along with $5 billion[56] to reduce debt, from broadening Hydro One's ownership.~~

~~The government will remain, by law, the largest single shareholder in Hydro One, restricting the Province from selling down to less than 40%[57] of the voting securities in Hydro One — and no other single shareholder or group of shareholders working in concert will be permitted to hold more than 10%[58] of the company's shares.~~

Commented [AL7]: Would suggest removing as may not be necessary in this context

[55] ~~Ontario Financing Authority~~
[56] ~~Ontario Financing Authority~~
[57] ~~Ontario Financing Authority~~
[58] ~~Ontario Financing Authority~~

FW_ QA Document.pdf

From:	Huang, Jackson (MEDG/MRIS)
To:	Thouin, Alena (ENERGY)
Cc:	Rehob, James (ENERGY)
Subject:	FW: QA Document
Date:	February 2, 2018 6:20:51 PM
Attachments:	QA - OPG OFHP Debt FinancingTech Briefing - AH - 20180201 - MO-EPE-LSBv2.docx

Hi Alena,

Sorry for the delay – please see attached our comments (highlighted in green) to the QA document for OFHP for your consideration.

We did not have much comments – the main comments are:

1. The way FSM fees are described (see "Q. How much was spent by OPG to complete this transaction? Will these costs be borne by ratepayers?")
2. The period during which IESO funds carrying costs (see "Q. How much was spent by OPG to complete this transaction? Will these costs be borne by ratepayers?")
3. Reference to IESO deferral vs regulatory asset (see "Q. When will the next tranche of debt be sold?")

Note that our comments that the clients have accepted (in the question regarding the election and undoing the FHP) are not highlighted.

Happy to discuss if you have any questions.

Thanks,
Jackson
For James and Jackson

QA - OPG OFHP Debt FinancingTech Briefing - A_4.pdf

Q&A: OPG OFHP Tech Briefing
Ministry of Energy
Key Messages/Questions and Answers
Date: January 25, 2018
Last Reviewed by: ESP

KEY MESSAGES:

- **Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history.**
- **OFHP has lowered electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. The plan includes the 8 per cent rebate introduced in January 2017 and builds on previously announced initiatives to deliver broad-based rate relief on all electricity bills. As many as half a million small businesses and farms are also benefitting from a reduction.**
- **Ontario Power Generation (OPG) has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than original estimates.**
- **Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[1]. The preliminary estimate from March 2017 was about $28 billion[2].**
- **OPG has developed solid investor relationships and has a large investor base in the structured finance space that ~~would be~~is the target market for financing Ontario's Fair Hydro Plan initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors[3], including major investors in the Canadian power and utility bonds market.**
- **Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.**
- **The senior officials and staff were from:**
  - **Ministry of Energy;**
  - **Ministry of Finance;**
  - **Treasury Board Secretariat;**
  - **Office of the Provincial Controller;**
  - **Cabinet Office;**

---

[1] Ministry of Energy
[2] Ministry of Energy, submission to Financial Accountability Officer
[3] Ontario Power Generation

Commented [NC(1]: This should be in KMs

Commented [NC(2]: This should be in KMs

- o Ontario Financing Authority (OFA);
- o Independent Electricity System Operator (IESO); and
- o Ontario Power Generation Inc. (OPG).

Commented [NC(3]: Add to KMs

- **~~Ontario Power Generation (OPG)~~OPG has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).**

- **OPG currently manages approximately $20 billion[4] in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts**

- **OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments.**

- **The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.**

[4] Ontario Financing Authority

Qs and As

Q. Why did the government introduce the Ontario Fair Hydro Plan?

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly $70 billion[5] has been invested in the electricity system, including more than $37[6] billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP lowered electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

In developing the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. What is Global Adjustment (GA)?

Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also recovers costs associated with running conservation programs in the province.

GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a reliable supply of electricity.

GA pays for the bulk of the recent investments in the electricity system. The majority of the province's electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that generating assets are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets.

---

[5] Ministry of Energy, *2017 Long-Term Energy Plan*
[6] Ministry of Energy, *2017 Long-Term Energy Plan*

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Q. Has the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? How much is the program expected to cost?

Ontario Power Generation (OPG) has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than original estimates.

Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[7]. The preliminary estimate from March 2017 was about $28 billion[8].

Commented [NC(4]: This should be in KMs

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty-year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[9] to approximately $20 billion[10]. These estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro Plan? Would it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?

Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).

OPG currently manages approximately $20 billion[11] in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.

OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

OPG has developed solid investor relationships and has a large investor base in the structured finance space that would be the target market for financing Ontario's Fair Hydro Plan initiative. For

[7] Ministry of Energy
[8] Ministry of Energy, submission to Financial Accountability Officer
[9] Ministry of Energy
[10] Ministry of Energy
[11] Ontario Financing Authority

example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors[12], including major investors in the Canadian power and utility bonds market.

Commented [NC(5]: This should be in KMs

In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than $2 billion[13] and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

Q. How much was spent by OPG to complete this transaction? Will these costs be borne by ratepayers?

Commented [HA(6]: Unfortunately have nothing that can speak to the first part of this question.

~~The government is dedicated to reducing electricity costs wherever possible, while maintaining reliability for all consumers.~~

~~With Ontario's Fair Hydro Plan and as a result of the government's prudent fiscal management, the Ontario government is delivering on its commitment to balance the budget this year, recognizing that balance provides the foundation for the long-term well-being and prosperity of Ontarians.~~

~~To relieve the current burden on ratepayers and share costs more fairly, a portion of the GA is being refinanced. Refinancing the Global Adjustment (GA) will provide significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built.~~

~~In the early years, it is intended that a portion of the costs covered by the GA will be refinanced to reduce pressure on today's electricity ratepayers. In later years, the cost of refinancing will be recovered from ratepayers.~~OPG was identified as the Financial Services Manager responsible for producing the financing plans and for the financing entity (i.e., Fair Hydro ~~Plan~~ Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

Commented [JH7]: Note correct name of financing entity

Under the *Ontario Fair Hydro Plan Act, 2017* (the "Act") and associated regulations, OPG is permitted to charge fees as financial services manager, which are calculated based on OPG's performance in managing the debt obligations and allow OPG to recover costs incurred in relation to the establishment, management and administration of the financing entity and/or the investment asset.

In accordance with regulations made under the Act, financial services manager fees incurred on or before July 31, 2021 are recovered from IESO, and recorded in the IESO variance account to form part of the IESO's regulatory asset. In accordance with the structure of Ontario's Fair Hydro Plan, in future years these amounts will be recovered from ratepayers.

Ontario's Fair Hydro Plan is designed to fairly allocate costs across the generations of electricity ratepayers. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system.

Further questions on OPG costs should be directed to OPG.

---

[12] Ontario Power Generation
[13] Ontario Power Generation

Q. Some say you are unfairly placing the burden of debt on future generations through things like Ontario's Fair Hydro Plan, how do you respond?

Future generations will be paying their fair share for a system they will be benefiting from in their lifetime. Not only will they benefit from a reliable electricity system, but also from cleaner air resulting from the elimination of coal-fired generation.

Ontario's Fair Hydro Plan (OFHP) acts much like taking out a new mortgage – providing much-needed relief now by spreading costs across the life of our assets. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Moving forward, Ontario's 2017 Long-Term Energy Plan (2017 LTEP) focuses on continuing to put downward pressure on electricity bills over the long term. Our robust electricity supply puts us in a good position to improve efficiency, increase transparency and enhance opportunities for innovation and competition to further reduce system costs. That is why Ontario's Fair Hydro Plan includes a commitment to improving sector efficiency and modernizing Ontario's electricity market, building on the collaboration of the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).

For example, IESO's Market Renewal initiative will result in a more efficient marketplace with competitive and transparent mechanisms that meet future system needs at the lowest cost. The initiative is expected to save up to $5.2 billion[14] over a 10-year period and forms a key component of Ontario's plan to ensure the affordability of electricity in the longer term.

Q. When will the next tranche of debt be sold?

OPG was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro ~~Plan~~ Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

OPG is expected to purchase the IESO's regulatory asset ~~deferral~~ monthly, and to issue longer term debt in the capital markets on a periodic basis.

~~The *Fair Hydro Act, 2017* enables the Independent Electricity System Operator (IESO) and Ontario Power Generation (OPG) to work together to spread out the costs of Ontario's clean energy investments over a longer period of time, which ensures that the costs of these investments are allocated fairly among current and future ratepayers. This will be accomplished through refinancing a portion of the Global Adjustment (GA), resulting in significant and immediate rate reductions.~~

~~Under the legislation, OPG has developed a financing plan, which sets out the funding obligations and amounts related to the financing of the deferred GA amounts. The Ontario Energy Board (OEB) will continue its role as regulator for the electricity sector. In particular, it will continue to set commodity~~

[14] Independent Electricity System Operator, *Assessment of the Benefits of Market Renewal (Brattle Group)*

~~rates for Regulated Price Plan (RPP) consumers, including cost reductions under the *Fair Hydro Act, 2017*. Debt and financing costs will be recovered through adjustments to consumer bills.~~

~~Borrowing is expected to be done in tranches, as set out in the Financing Plan developed by OPG.~~

Q. There is an election in 17 weeks. Can the Ontario Fair Hydro Plan be undone? What will that mean for the refinancing of the GA and Ontario ratepayers?

~~The~~ Ontario's Fair Hydro Plan is a function of both legislation and finance, ~~has been developed~~ and its implementation ~~has begun and~~ is ongoing. ~~The Fair Hydro Plan (~~GA Refinancing~~)~~ is implemented through ongoing financings that OPG, as the Financial Services Manager, takes to market. ~~Through the Ontario Fair Hydro Plan Act, 2017, each financing is final once the financing has been completed, and cannot be undone until fully repaid.~~ ~~cannot be undone~~.

The *Ontario Fair Hydro Plan Act, 2017* and associated regulations provide the legislative framework for the GA refinancing program and its policy goals, allowing certain electricity system costs to be ~~to~~ fairly allocated across generations of electricity ratepayers. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system.

In accordance with the legislation and associated regulations, Ontario's Fair Hydro Plan ~~is lowering rates~~has lowered electricity bills by 25 per cent on average across the province for ~~all~~ residential customers. As many as half a million small businesses and farms are also benefitting. Increases will be held to the rate of inflation for four years.

~~Under GA refinancing, initial analysis indicates that borrowing would occur for about 10 years. Initial analysis indicates that it is currently anticipated that loans will begin to be paid back in the mid-to-late 2020s. The exact timing will be determined by the markets and other factors as we strive to balance costs and benefits in the fairest way possible. This is a significant change that represents a fair solution to an issue that has unfairly burdened current electricity ratepayers. This does not sacrifice investments in the energy system. We're changing the way electricity costs are recovered, and moving funding for certain social programs off of hydro bills. This plan is delivering the biggest rate reduction in Ontario's history.~~

~~The Ontario Fair Hydro Plan cannot be undone.~~

~~Ontario's Fair Hydro Plan is lowering rates by 25 per cent on average across the province for all residential customers. As many as half a million small businesses and farms are also benefitting. Increases will be held to the rate of inflation for four years.~~

~~Under GA refinancing, initial analysis indicates that borrowing would occur for about 10 years. Initial analysis indicates that it is currently anticipated that loans will begin to be paid back in the mid-to-late 2020s. The exact timing will be determined by the markets and other factors as we strive to balance costs and benefits in the fairest way possible. This is a significant change that represents a fair solution to an issue that has unfairly burdened current electricity ratepayers. This does not sacrifice investments in the energy system. We're changing the way electricity costs are recovered, and moving funding for social programs off of hydro bills. This plan is delivering the biggest rate reduction in Ontario's history.~~

Q. Who was involved in the policy and implementation process to meet the mandate?

Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.

The senior officials and staff were from:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

Commented [NC(8]: Add to KMs

In development and implementation of Global Adjustment (GA) refinancing, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

Auditor General and Financial Accountability Office reports

Q. The Auditor General and the Financial Accountability Office both suggest that the cost of borrowing will be more expensive than traditional government borrowing? Is this true?

In the development of Ontario's Fair Hydro Plan (OFHP), the government made the policy decision that deferred electricity system costs should be borne by the rate-base and not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible consumers.

Ontario Power Generation (OPG) was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro ~~Plan~~ Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner.

OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

With respect to the $4 billion[15] figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Commented [NC(9]: Will we know what the new $4 billion number will be on February 9?

Commented [AL10]: The Ministry doesn't have an equivalent number to the FAO's $4 billion and doesn't currently expect to calculate one. Numbers regarding the forecasted cost of the program (debt and interest) will continue to be updated.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast

[15] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[16]. The preliminary estimate from March 2017 was about $28 billion[17].

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[18] to approximately $20 billion[19]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manage (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 billion[20] to less than $19 billion[21].

Q. Has the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? I understand that the Office of the Audit General (OAG) has asked what are the factors that resulted in the changes in estimates from March 1 to August 31?

With respect to the $4 billion[22] figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[23]. The preliminary estimate from March 2017 was about $28 billion[24].

[16] Ministry of Energy
[17] Ministry of Energy, submission to Financial Accountability Officer
[18] Ministry of Energy
[19] Ministry of Energy
[20] Ministry of Energy
[21] Ministry of Energy
[22] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*
[23] Ministry of Energy
[24] Ministry of Energy, submission to Financial Accountability Officer

The revised estimates are the result of a number of factors, including updated long-term cost projections for the electricity system and residential bills provided by the Independent Electricity System Operator (IESO).

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[25] to approximately $20 billion[26]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manage (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 billion[27] to less than $19 billion[28].

Commented [NC(11]: I'm a little unclear on the difference between interest cost and peak debt?

Commented [AL12]: Peak debt represents the peak of accumulated principle and interest, which is forecasted to occur in the later 2020s. These interest figures represent the forecasted total amount of interest that will be payable over the life of the program.

Q. In the development of Ontario's Fair Hydro Plan, did the government set up the financing structure intentionally to keep it off government books?

No. GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

GA refinancing operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. How do you respond to the Financial Accountability Office's (FAO) suggestion from May 2017 that using Ontario Power Generation as the borrowing agent will cost $4 billion more? Why not have the Province borrow for the OFHP?

The policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets. Therefore, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base.

We believe it is appropriate for ratepayers to pay for the financing of electricity assets. The rate-base has a different risk profile than the tax-base, which would be reflected in different interest costs.

[25] Ministry of Energy
[26] Ministry of Energy

Having the rate-base pay is not a new policy, for example Hydro One has borrowed in the capital markets since the early 2000s[29].

The $4 billion figure was an estimate made by the Financial Accountability Office (FAO) based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[30]. The preliminary estimate from March 2017 was about $28 billion[31].

The FAO report itself concludes by saying "the FAO's estimates are subject to many assumptions and uncertainties (…) Fiscal impact may differ significantly from the FAO's estimates."

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[32]to approximately $20 billion[33]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 billion[34] to less than $19 billion[35].

Q. Do you disagree with the FAO on financial costs?

With respect to the $4 billion[36] figure referenced by the Financial Accountability Office (FAO) in its May 2017, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty-year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak

---

[29] Ministry of Finance
[30] Ministry of Energy
[31] Ministry of Energy, submission to Financial Accountability Officer
[32] Ministry of Energy
[33] Ministry of Energy

[36] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

debt over the thirty year life of OFHP will be approximately $20 billion[37]. The preliminary estimate from March 2017 was about $28 billion[38].

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[39] to approximately $20 billion[40]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The Ministry estimates of total interest cost also decreased from $25 billion[41] to less than $19 billion[42].

Reasoning for Accounting Approach

Q. How do you respond to the Auditor General's claim that the government ignored warnings regarding a potential adverse audit opinion of Ontario's public accounts?

The government's financial statements are prepared in accordance with Public Sector Accounting Standards (PSAS), and will continue to follow these standards for the transactions resulting from Ontario's Fair Hydro Plan (OFHP) in 2017-18 and in future years.

In regards to rate-regulated accounting, PSAS are silent on the use of regulated accounting:

- PSAS acknowledges that it does not provide guidance on all possible transactions and notes that it is necessary to refer to other sources of guidance that are consistent with the PSAS framework; and
- US GAAP, with the most developed guidance on rate-regulated accounting, is the appropriate guidance to reference.

Many entities in Canada, including OPG and Hydro One use rate-regulated accounting:

- The OAG can refer to the CPA Canada research study that was shared.

[37] Ministry of Energy
[38] Ministry of Energy, submission to Financial Accountability Officer
[39] Ministry of Energy
[40] Ministry of Energy

- Rate-regulated accounting is well understood in the electricity sector.
- The recognition of regulatory assets brings IESO in line with 6 other independent system operators in North America, including AESO, ISO New England, NYISO, MISO, PJM and ERCOT.

The IESO management, IESO's Audit Committee, IESO's Board of Directors, IESO's external auditor and the Office of the Provincial Controller all support the use of rate-regulated accounting by IESO.

In the development of OFHP, the government consulted with several third party advisors in the application of accounting standards. This is normal course of business governments take for complex transactions.

FW_ QA_Equity_OPG.pdf

From:	Cox, Hilary (ENERGY)
To:	Berg, Denna (ENERGY); Schlaepfer, Martin (ENERGY)
Subject:	FW: QA_Equity_OPG
Date:	October 17, 2017 7:49:32 AM
Attachments:	QA_Equity_OPG.docx

Hi Denna and Martin –

The DM had asked for a backpocket QA on the equity injection to OPG. Said QA attached.

HC

QA_Equity_OPG.pdf

Q&A Response:

Q. Why does Ontario Power Generation (OPG) need an equity injection from the province as part of the implementation of Global Adjustment (GA) refinancing? I thought the GA refinancing was being funded through the rate-base?

To provide immediate and significant rate relief to residential consumers, Ontario's Fair Hydro Plan is refinancing a portion of the Global Adjustment (GA). The initiative allows electricity costs to be spread out and over present and future generations.

Given OPG's broad sector and commercial expertise, OPG has been appointed as the Finance Services Manager responsible for refinancing the GA. As part of this role, OPG will carry the debt borrowed for this refinancing on its balance sheet. In order to keep its capital structure in line, it will require additional equity from the Province, OPG's sole shareholder.

The Province intends to provide equity injections by purchasing additional shares of OPG on an ongoing basis. These equity injections are anticipated to represent 44 per cent of all GA refinancing amounts. Note: Initial forecasts estimate equity injections of $1.1 billion for 2017-18.

As part of its annual business plan, OPG is required to submit forecast equity requirements for future years; OPG's Business Plan is expected to be submitted November/December 2017.

Fw_ QA Document_1.pdf

From:	Huang, Jackson (MEDG/MRIS)
To:	Lightbody, Ava (ENERGY)
Cc:	Rehob, James (ENERGY)
Subject:	Fw: QA Document
Date:	February 5, 2018 11:20:32 AM
Attachments:	QA - OPG OFHP Debt FinancingTech Briefing - AH - 20180201 - MO-EPE-LSBv2.docx

Hi Ava,

Please see attached our consolidated comments on the QA document. Alena is okay with our comments.

Thanks,
Jackson
For James and Jackson

From: Huang, Jackson (MEDG/MRIS) <Jackson.Huang@ontario.ca>
Sent: Friday, February 2, 2018 6:20 PM
To: Thouin, Alena (ENERGY)
Cc: Rehob, James (ENERGY)
Subject: FW: QA Document

Hi Alena,

Sorry for the delay – please see attached our comments (highlighted in green) to the QA document for OFHP for your consideration.

We did not have much comments – the main comments are:

1. The way FSM fees are described (see "Q. How much was spent by OPG to complete this transaction? Will these costs be borne by ratepayers?")
2. The period during which IESO funds carrying costs (see "Q. How much was spent by OPG to complete this transaction? Will these costs be borne by ratepayers?")
3. Reference to IESO deferral vs regulatory asset (see "Q. When will the next tranche of debt be sold?")

Note that our comments that the clients have accepted (in the question regarding the election and undoing the FHP) are not highlighted.

Happy to discuss if you have any questions.

Thanks,
Jackson
For James and Jackson

QA - OPG OFHP Debt FinancingTech Briefing - A_5.pdf

CONFIDENTIAL

Q&A: OPG OFHP Tech Briefing
Ministry of Energy
Key Messages/Questions and Answers
Date: January 25, 2018
Last Reviewed by: ESP

KEY MESSAGES:

- **Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history.**
- **OFHP has lowered electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. The plan includes the 8 per cent rebate introduced in January 2017 and builds on previously announced initiatives to deliver broad-based rate relief on all electricity bills. As many as half a million small businesses and farms are also benefitting from a reduction.**
- **Ontario Power Generation (OPG) has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than original estimates.**
- **Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[1]. The preliminary estimate from March 2017 was about $28 billion[2].**
- **OPG has developed solid investor relationships and has a large investor base in the structured finance space that ~~would be~~is the target market for financing Ontario's Fair Hydro Plan initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors[3], including major investors in the Canadian power and utility bonds market.**
- **Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.**
- **The senior officials and staff were from:**
  - **Ministry of Energy;**
  - **Ministry of Finance;**
  - **Treasury Board Secretariat;**
  - **Office of the Provincial Controller;**
  - **Cabinet Office;**

Commented [NC(1]: This should be in KMs

Commented [NC(2]: This should be in KMs

[1] Ministry of Energy
[2] Ministry of Energy, submission to Financial Accountability Officer
[3] Ontario Power Generation

- o Ontario Financing Authority (OFA);
- o Independent Electricity System Operator (IESO); and
- o Ontario Power Generation Inc. (OPG).

Commented [NC(3]: Add to KMs

- **~~Ontario Power Generation (OPG)~~OPG has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).**

- **OPG currently manages approximately $20 billion[4] in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts**

- **OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments.**

- **The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.**

[4] Ontario Financing Authority

Qs and As

Q. Why did the government introduce the Ontario Fair Hydro Plan?

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly $70 billion[5] has been invested in the electricity system, including more than $37[6] billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP lowered electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

In developing the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. What is Global Adjustment (GA)?

Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also recovers costs associated with running conservation programs in the province.

GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a reliable supply of electricity.

GA pays for the bulk of the recent investments in the electricity system. The majority of the province's electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that generating assets are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets.

[5] Ministry of Energy, *2017 Long-Term Energy Plan*
[6] Ministry of Energy, *2017 Long-Term Energy Plan*

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Q. Has the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? How much is the program expected to cost?

Ontario Power Generation (OPG) has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than original estimates.

Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[7]. The preliminary estimate from March 2017 was about $28 billion[8].

Commented [NC(4]: This should be in KMs

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty-year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[9] to approximately $20 billion[10]. These estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro Plan? Would it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?

Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).

OPG currently manages approximately $20 billion[11] in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.

OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

OPG has developed solid investor relationships and has a large investor base in the structured finance space that would be the target market for financing Ontario's Fair Hydro Plan initiative. For

[7] Ministry of Energy
[8] Ministry of Energy, submission to Financial Accountability Officer
[9] Ministry of Energy
[10] Ministry of Energy
[11] Ontario Financing Authority

example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors[12], including major investors in the Canadian power and utility bonds market.

Commented [NC(5]: This should be in KMs

In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than $2 billion[13] and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

Q. How much was spent by OPG to complete this transaction? Will these costs be borne by ratepayers?

Commented [HA(6]: Unfortunately have nothing that can speak to the first part of this question.

~~The government is dedicated to reducing electricity costs wherever possible, while maintaining reliability for all consumers.~~

~~With Ontario's Fair Hydro Plan and as a result of the government's prudent fiscal management, the Ontario government is delivering on its commitment to balance the budget this year, recognizing that balance provides the foundation for the long-term well-being and prosperity of Ontarians.~~

~~To relieve the current burden on ratepayers and share costs more fairly, a portion of the GA is being refinanced. Refinancing the Global Adjustment (GA) will provide significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built.~~

~~In the early years, it is intended that a portion of the costs covered by the GA will be refinanced to reduce pressure on today's electricity ratepayers. In later years, the cost of refinancing will be recovered from ratepayers.~~OPG was identified as the Financial Services Manager responsible for producing the financing plans and for the financing entity (i.e., Fair Hydro ~~Plan~~ Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

Commented [JH7]: Note correct name of financing entity

Under the *Ontario Fair Hydro Plan Act, 2017* (the "Act") and associated regulations, OPG is permitted to charge fees as financial services manager, which are calculated based on OPG's performance in managing the debt obligations and allow OPG to recover costs incurred in relation to the establishment, management and administration of the financing entity and/or the investment asset.

In accordance with regulations made under the Act, financial services manager fees incurred on or before July 31, 2021 are recovered from IESO, and recorded in the IESO variance account to form part of the IESO's regulatory asset. In accordance with the structure of Ontario's Fair Hydro Plan, in future years these amounts will be recovered from ratepayers.

Ontario's Fair Hydro Plan is designed to fairly allocate costs across the generations of electricity ratepayers. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system.

Further questions on OPG costs should be directed to OPG.

[12] Ontario Power Generation
[13] Ontario Power Generation

Q. Some say you are unfairly placing the burden of debt on future generations through things like Ontario's Fair Hydro Plan, how do you respond?

Future generations will be paying their fair share for a system they will be benefiting from in their lifetime. Not only will they benefit from a reliable electricity system, but also from cleaner air resulting from the elimination of coal-fired generation.

Ontario's Fair Hydro Plan (OFHP) acts much like taking out a new mortgage – providing much-needed relief now by spreading costs across the life of our assets. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Moving forward, Ontario's 2017 Long-Term Energy Plan (2017 LTEP) focuses on continuing to put downward pressure on electricity bills over the long term. Our robust electricity supply puts us in a good position to improve efficiency, increase transparency and enhance opportunities for innovation and competition to further reduce system costs. That is why Ontario's Fair Hydro Plan includes a commitment to improving sector efficiency and modernizing Ontario's electricity market, building on the collaboration of the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).

For example, IESO's Market Renewal initiative will result in a more efficient marketplace with competitive and transparent mechanisms that meet future system needs at the lowest cost. The initiative is expected to save up to $5.2 billion[14] over a 10-year period and forms a key component of Ontario's plan to ensure the affordability of electricity in the longer term.

Q. When will the next tranche of debt be sold?

OPG was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro ~~Plan~~ Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

OPG is expected to purchase the IESO's regulatory asset ~~deferral~~ monthly, and to issue longer term debt in the capital markets on a periodic basis.

~~The *Fair Hydro Act, 2017* enables the Independent Electricity System Operator (IESO) and Ontario Power Generation (OPG) to work together to spread out the costs of Ontario's clean energy investments over a longer period of time, which ensures that the costs of these investments are allocated fairly among current and future ratepayers. This will be accomplished through refinancing a portion of the Global Adjustment (GA), resulting in significant and immediate rate reductions.~~

~~Under the legislation, OPG has developed a financing plan, which sets out the funding obligations and amounts related to the financing of the deferred GA amounts. The Ontario Energy Board (OEB) will continue its role as regulator for the electricity sector. In particular, it will continue to set commodity~~

[14] Independent Electricity System Operator, *Assessment of the Benefits of Market Renewal (Brattle Group)*

~~rates for Regulated Price Plan (RPP) consumers, including cost reductions under the *Fair Hydro Act, 2017*. Debt and financing costs will be recovered through adjustments to consumer bills.~~

~~Borrowing is expected to be done in tranches, as set out in the Financing Plan developed by OPG.~~

Q. There is an election in 17 weeks. Can the Ontario Fair Hydro Plan be undone? What will that mean for the refinancing of the GA and Ontario ratepayers?

~~The~~ Ontario's Fair Hydro Plan is a function of both legislation and finance, ~~has been developed~~ and its implementation ~~has begun and~~ is ongoing. ~~The Fair Hydro Plan (~~GA Refinancing~~)~~ is implemented through ongoing financings that OPG, as the Financial Services Manager, takes to market. ~~Through the Ontario Fair Hydro Plan Act, 2017, each financing is final once the financing has been completed, and cannot be undone until fully repaid.~~ ~~cannot be undone~~.

The *Ontario Fair Hydro Plan Act, 2017* and associated regulations provide the legislative framework for the GA refinancing program and its policy goals, allowing certain electricity system costs to be ~~to~~ fairly allocated across generations of electricity ratepayers. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system.

In accordance with the legislation and associated regulations, Ontario's Fair Hydro Plan ~~is lowering rates~~has lowered electricity bills by 25 per cent on average across the province for ~~all~~ residential customers. As many as half a million small businesses and farms are also benefitting. Increases will be held to the rate of inflation for four years.

~~Under GA refinancing, initial analysis indicates that borrowing would occur for about 10 years. Initial analysis indicates that it is currently anticipated that loans will begin to be paid back in the mid-to-late 2020s. The exact timing will be determined by the markets and other factors as we strive to balance costs and benefits in the fairest way possible. This is a significant change that represents a fair solution to an issue that has unfairly burdened current electricity ratepayers. This does not sacrifice investments in the energy system. We're changing the way electricity costs are recovered, and moving funding for certain social programs off of hydro bills. This plan is delivering the biggest rate reduction in Ontario's history.~~

~~The Ontario Fair Hydro Plan cannot be undone.~~

~~Ontario's Fair Hydro Plan is lowering rates by 25 per cent on average across the province for all residential customers. As many as half a million small businesses and farms are also benefitting. Increases will be held to the rate of inflation for four years.~~

~~Under GA refinancing, initial analysis indicates that borrowing would occur for about 10 years. Initial analysis indicates that it is currently anticipated that loans will begin to be paid back in the mid-to-late 2020s. The exact timing will be determined by the markets and other factors as we strive to balance costs and benefits in the fairest way possible. This is a significant change that represents a fair solution to an issue that has unfairly burdened current electricity ratepayers. This does not sacrifice investments in the energy system. We're changing the way electricity costs are recovered, and moving funding for social programs off of hydro bills. This plan is delivering the biggest rate reduction in Ontario's history.~~

Q. Who was involved in the policy and implementation process to meet the mandate?

Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.

The senior officials and staff were from:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

Commented [NC(8]: Add to KMs

In development and implementation of Global Adjustment (GA) refinancing, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

<u>Auditor General and Financial Accountability Office reports</u>

Q. The Auditor General and the Financial Accountability Office both suggest that the cost of borrowing will be more expensive than traditional government borrowing? Is this true?

In the development of Ontario's Fair Hydro Plan (OFHP), the government made the policy decision that deferred electricity system costs should be borne by the rate-base and not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible consumers.

Ontario Power Generation (OPG) was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro ~~Plan~~ Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner.

OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

With respect to the $4 billion[15] figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Commented [NC(9]: Will we know what the new $4 billion number will be on February 9?

Commented [AL10]: The Ministry doesn't have an equivalent number to the FAO's $4 billion and doesn't currently expect to calculate one. Numbers regarding the forecasted cost of the program (debt and interest) will continue to be updated.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast

[15] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[16]. The preliminary estimate from March 2017 was about $28 billion[17].

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[18] to approximately $20 billion[19]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manage (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 billion[20] to less than $19 billion[21].

Q. Has the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? I understand that the Office of the Audit General (OAG) has asked what are the factors that resulted in the changes in estimates from March 1 to August 31?

With respect to the $4 billion[22] figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[23]. The preliminary estimate from March 2017 was about $28 billion[24].

[16] Ministry of Energy
[17] Ministry of Energy, submission to Financial Accountability Officer
[18] Ministry of Energy
[19] Ministry of Energy
[20] Ministry of Energy
[21] Ministry of Energy
[22] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*
[23] Ministry of Energy
[24] Ministry of Energy, submission to Financial Accountability Officer

The revised estimates are the result of a number of factors, including updated long-term cost projections for the electricity system and residential bills provided by the Independent Electricity System Operator (IESO).

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[25] to approximately $20 billion[26]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manage (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 billion[27] to less than $19 billion[28].

Commented [NC(11]: I'm a little unclear on the difference between interest cost and peak debt?

Commented [AL12]: Peak debt represents the peak of accumulated principle and interest, which is forecasted to occur in the later 2020s. These interest figures represent the forecasted total amount of interest that will be payable over the life of the program.

Q. In the development of Ontario's Fair Hydro Plan, did the government set up the financing structure intentionally to keep it off government books?

No. GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

GA refinancing operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. How do you respond to the Financial Accountability Office's (FAO) suggestion from May 2017 that using Ontario Power Generation as the borrowing agent will cost $4 billion more? Why not have the Province borrow for the OFHP?

The policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets. Therefore, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base.

We believe it is appropriate for ratepayers to pay for the financing of electricity assets. The rate-base has a different risk profile than the tax-base, which would be reflected in different interest costs.

[25] Ministry of Energy
[26] Ministry of Energy

Having the rate-base pay is not a new policy, for example Hydro One has borrowed in the capital markets since the early 2000s[29].

The $4 billion figure was an estimate made by the Financial Accountability Office (FAO) based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[30]. The preliminary estimate from March 2017 was about $28 billion[31].

The FAO report itself concludes by saying "the FAO's estimates are subject to many assumptions and uncertainties (…) Fiscal impact may differ significantly from the FAO's estimates."

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[32]to approximately $20 billion[33]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 billion[34] to less than $19 billion[35].

Q. Do you disagree with the FAO on financial costs?

With respect to the $4 billion[36] figure referenced by the Financial Accountability Office (FAO) in its May 2017, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty-year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak

---
[29] Ministry of Finance
[30] Ministry of Energy
[31] Ministry of Energy, submission to Financial Accountability Officer
[32] Ministry of Energy
[33] Ministry of Energy

[36] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

debt over the thirty year life of OFHP will be approximately $20 billion[37]. The preliminary estimate from March 2017 was about $28 billion[38].

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[39] to approximately $20 billion[40]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The Ministry estimates of total interest cost also decreased from $25 billion[41] to less than $19 billion[42].

Reasoning for Accounting Approach

Q. How do you respond to the Auditor General's claim that the government ignored warnings regarding a potential adverse audit opinion of Ontario's public accounts?

The government's financial statements are prepared in accordance with Public Sector Accounting Standards (PSAS), and will continue to follow these standards for the transactions resulting from Ontario's Fair Hydro Plan (OFHP) in 2017-18 and in future years.

In regards to rate-regulated accounting, PSAS are silent on the use of regulated accounting:

- PSAS acknowledges that it does not provide guidance on all possible transactions and notes that it is necessary to refer to other sources of guidance that are consistent with the PSAS framework; and
- US GAAP, with the most developed guidance on rate-regulated accounting, is the appropriate guidance to reference.

Many entities in Canada, including OPG and Hydro One use rate-regulated accounting:

- The OAG can refer to the CPA Canada research study that was shared.

---

[37] Ministry of Energy
[38] Ministry of Energy, submission to Financial Accountability Officer
[39] Ministry of Energy
[40] Ministry of Energy

- Rate-regulated accounting is well understood in the electricity sector.
- The recognition of regulatory assets brings IESO in line with 6 other independent system operators in North America, including AESO, ISO New England, NYISO, MISO, PJM and ERCOT.

The IESO management, IESO's Audit Committee, IESO's Board of Directors, IESO's external auditor and the Office of the Provincial Controller all support the use of rate-regulated accounting by IESO.

In the development of OFHP, the government consulted with several third party advisors in the application of accounting standards. This is normal course of business governments take for complex transactions.

Fw_ Technical Briefing Ontario s Fair Hydro Pla....pdf

From:	Schlaepfer, Martin (ENERGY)
To:	Murray, Maud (ENERGY/MEDG/MRIS/MOI); Thouin, Alena (ENERGY); Lyon, Sam (ENERGY)
Cc:	Manoharan, Kesayini (MEDG/MRIS)
Subject:	Fw: Technical Briefing Ontario's Fair Hydro Plan GA Refinancing
Date:	November 29, 2017 10:06:09 PM
Attachments:	Technical Briefing Ontario Fair Hydro Plan Global Adjustment (003).pptx

FYI for tomorrow's rate mitigation implementation communications meeting.

Original Message
From: Martin.Schlaepfer@ontario.ca
Sent: Wednesday, November 29, 2017 10:02 PM
To: Teliszewsky, Andrew (ENERGY)
Cc: Serge Imbrogno Serge Imbrogno; Whittington, Matt (ENERGY); Berry, James (ENERGY); Baker, Carys (ENERGY)
Subject: Technical Briefing Ontario's Fair Hydro Plan GA Refinancing

Hi Andrew,

Attached is OPG's technical briefing deck for discussion at tomorrow's meeting.

Thanks,
Martin

Technical Briefing Ontario Fair Hydro Plan Gl.pdf

Technical Briefing – Financing Update For Ontario's Fair Hydro Plan

January 2017

Ontario's Fair Hydro Plan – Context

- Ontario's Fair Hydro Plan (OFHP) is delivering rate relief to residential consumers, farms, most small businesses, long-term care homes and condominiums.
    - Since 2003, the government has invested nearly $70 billion in the electricity system, including more than $37 billion in electricity generation to ensure the system is clean and reliable.

- OFHP is comprised of a series of initiatives, including the refinancing of a portion of Global Adjustment (GA), the shifting of cost recovery for electricity support programs from electricity bills to provincial revenue, and the 8 per cent rebate introduced by the government on January 1, 2017.

- Refinancing the GA, which pays for the bulk of the recent investments in the electricity system, provides significant and immediate rate relief by matching the cost of electricity investments with the expected useful life of the generation that has been built.
    - The majority of the province's electricity generators are under 20-year contracts, and are expected to be able to operate beyond their contract lives.

Ontario's Fair Hydro Plan – Context (cont'd)

- Since the March 2, 2017 OFHP announcement, a number of key milestones have been reached in the implementation of OFHP, including:
    - May 1, 2017: Partial Global Adjustment (GA) refinancing incorporated into the OEB's Regulated Price Plan (RPP) report;
    - June 1, 2017: The Fair Hydro Act, 2017 (FHA) received Royal Assent;
    - June 15, 2017: Regulations to enable new and enhanced electricity social programs and shift associated program cost from the rate-base to tax-base came into effect; and
    - July 1, 2017: The full 25% reduction of electricity bill came into effect on July 1, 2017, including the 8% rebate.

- Ontario Power Generation (OPG) is wholly-owned by the Province of Ontario and produces almost half of the electricity used in Ontario. OPG owns and operates: two nuclear stations, 66 hydroelectric stations, two biomass stations and one thermal station.

- OPG has been working with the government, the Independent Electricity System Operator (IESO), the Ontario Energy Board (OEB) and legal, financial and energy sector third-party experts on the implementation of OFHP.

Role of Ontario Power Generation (OPG)

- The OHFP identified OPG as the Financial Services Manager (FSM) assigned to develop the financing plans and manage the Fair Hydro Trust, which manages the debt obligations associated with GA refinancing.

- OPG has extensive experience in the Ontario energy market, capital markets, regulation and fund management and will ensure that the refinancing will be done in the most efficient and cost-effective manner.

    - In addition to executing hundreds of millions in project financing over the past several years, OPG completed its first bond offering in the Canadian public market with $500 million unsecured 10-year bonds in October 2017.

    - OPG currently manages approximately $20 billion in nuclear funds through the Decommissioning Segregated Fund and the Used Fuel Segregated Fund, and $15 billion in pension funds.

    - OPG has developed solid investor relationships and has a large investor base in the structured finance space for financing Ontario's Fair Hydro Plan (OFHP) initiative.

- [NTD: Another bullet to close out the slide]

OPG’s Fair Hydro Trust

- On November 22, 2017, OPG’s Board of Directors approved OPG’s plan for participation in OFHP and to act as the FSM.
    - The OPG’s Fair Hydro Trust was established on [Dec xx 2017]

- Rating agencies have assigned ratings of:
    - Senior Debt: xxx Moody’s, yyy DBRS;
    - Subordinated Debt: xxx Moody’s yyy DBRS; and
    - Junior Subordinated Debt: xxx Moody’s yyy DBRS.

- [NTD: need another bullet about governance, reporting transparency]

OPG's Fair Hydro Trust – Financing to Date

- To date, [$1.2 billion] in GA payments have been deferred under OFHP and held by IESO.
- OPG's Fair Hydro Trust purchased this asset in December 2017, and the purchase was financed as follows:
    - Borrowing by the Trust through a bank syndicate in December, which was refinanced in January by senior debt from capital markets [$610 million] (51%);
    - Equity injection by the Province [$530 million] (44%) invested as subordinated debt in the Trust; and
    - OPG subordinated debt in the Trust [$60 million] (5%) already raised through the initial borrowing.
- [NTD: Placeholder about success/level of interest in the offering]
- For comparison purposes, OPG's debt financing in October 2017 was priced at 3.32%

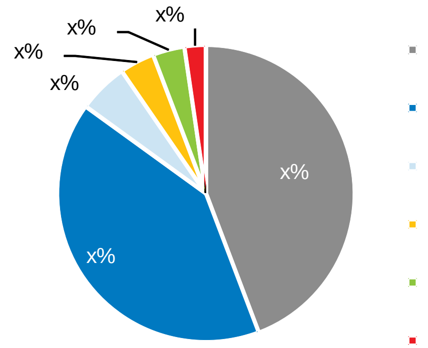
Debt Offering Summary

[NTD: Do we need this slide or is it just too detailed]

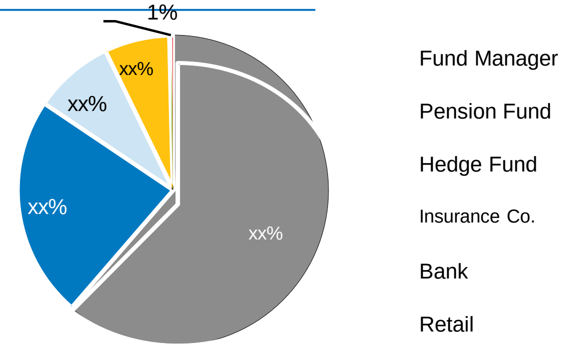
TERMS SUMMARY

Issuer	Fair Hydro Trust .
Pricing Date	xx-Dec 17
Settlement Date	xx-Dec-17
Ratings (DBRS/Moodys)	xxx
Amount	$xxx million
Coupon	x.xx%
Coupon Dates	xxx and xxx
Maturity Date	x-xxx-xx
Spread vs. Benchmark	+xx bps (credit: +xx bps, curve: +xx bps)
GoC Curve	GoC x.xx% due xx, xxxx GoC x.xx% due xx, xxxx
GoC Benchmark	GoC x.xx% due xx, xxxx
Benchmark Price/ Yield	$xx.xx / x.xx%
Price	$xxxx
Yield	x.xxx%
Syndicate	xxxx

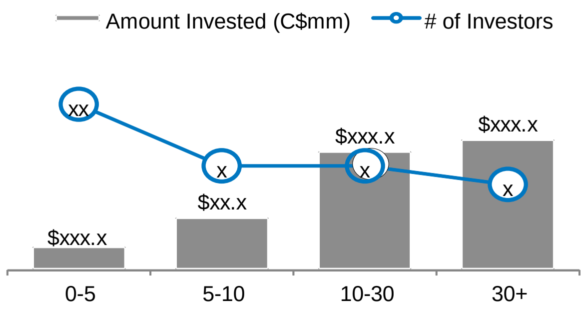
INVESTOR LOCATION



INVESTOR TYPE



ALLOCATION HISTOGRAM[1]



1. Co-Lead Agent & Bookrunner.

OPG’s Fair Hydro Trust – Financing Moving Forward

- In subsequent months it is expected that OPG’s Fair Hydro Trust will purchase subsequent assets from IESO (i.e., approximately $200 million per month) and raise any required financing.

- A second round of borrowing will take place in [Q2 – 2018] to provide the long term financing for the Trust

- [anything we may want to add about how the program will mature over time]

Reporting Requirements

- Due to OPG's ownership and control over the key activities of the OPG's Fair Hydro Trust, OPG will consolidate the financial results of the Trust in accordance with US GAAP.

    - OPG will report the financial results of the Trust's operations in its 2017 annual report and 4th Quarter financial results and will continue to be reported in subsequent financial reports

- The Trust's activities will be reported as a separate segment in OPG's overall results as follows:
    - Regulated – Nuclear Generation;
    - Regulated – Hydroelectric;
    - Contracted Generation Portfolio;
    - Regulated - Nuclear Waste Management;
    - Services, Trading, and Other Generation; and
    - Fair Hydro Trust.

- The Trust's financial results will also be reported directly to the Province as OPG's shareholder.

Questions?

Fw_ Working Draft of OFHP Reg _ CO Pink Note .pdf

From:	Cox, Hilary (ENERGY)
To:	Schlaepfer, Martin (ENERGY)
Subject:	Fw: Working Draft of OFHP Reg / CO Pink Note
Date:	October 24, 2017 5:25:49 PM
Attachments:	REG-11654_ID51067_LRC_CBN-DRAFT-V10.docx reg2017 0512 e10 shared with OPG and OEB Oct23.docx

Hi Martin -

Please use this version of the pink note instead - Steen made some additional edits.

HC

Sent from my BlackBerry 10 smartphone on the Rogers network.

From: Hume, Steen (ENERGY) <Steen.Hume@ontario.ca>
Sent: Tuesday, October 24, 2017 5:21 PM
To: Cox, Hilary (ENERGY)
Subject: Working Draft of OFHP Reg / CO Pink Note

Hi. Can you share the attached materials with Martin.

The attached regulation is the draft from yesterday (new version is in production) and the CO note is the one I just signed off on this afternoon.

Thanks,

From: Hume, Steen (ENERGY)
Sent: October 24, 2017 2:20 PM
To: Hilary Cox (ENERGY) (Hilary.Cox@ontario.ca)
Subject: FW: URGENT: OFHP Reg- Exec summary

Hi. Made a couple of edits highlighted in yellow, etc.

Thanks

From: Hindmarch-Watson, Tim (CAB)
Sent: October 24, 2017 1:51 PM
To: Schlaepfer, Martin (ENERGY) <Martin.Schlaepfer@ontario.ca>
Cc: Moore, Karen (CAB) <Karen.Moore4@ontario.ca>; Teare, Rebecca (CAB) <Rebecca.Teare2@ontario.ca>
Subject: URGENT: OFHP Reg- Exec summary
Importance: High

Hi Martin:

Please review and provide any **comments by 2pm**:

<u>The proposal is consistent with Cabinet direction.</u>

On March 2, 2017, the government announced Ontario's Fair Hydro Plan (OFHP), which included refinancing a portion of the Global Adjustment (GA). The Ontario Fair Hydro Plan Act, 2017 (OFHPA), which received Royal Assent on June 1, 2017, put in place mechanisms including appropriate payment settlement and cost-recovery authorities for and through the Independent Electricity System Operator (IESO) to manage the deferred GA costs.

On June 14, 2017, new regulations were created under the OFHPA that support calculations related to GA refinancing and one regulation was amended to authorize IESO to borrow to fund the regulatory asset as part of the financing structure. On June 27, 2017, a new regulation was created under the OFHPA that details the roles and responsibilities of the Financial Services Manager (FSM, i.e., Ontario Power Generation (OPG)), IESO and the Ontario Energy Board (OEB).

This proposal is the next step in the implementation of GA refinancing. The Ministry of Energy (ENERGY) is proposing amendments to O.Reg. 206/17 (i.e., general regulation) under OFHPA ~~the Ontario Fair Hydro Plan Act, 2017 (OFHPA)~~ that would:

1. Enable Ontario Power Generation (OPG), as Financial Services Manager (FSM) to establish and charge fees, once approved by the Ontario Energy Board (OEB), for the services it provides under the OFHPA; and~~;~~
2. Enable OPG, as FSM to recover "carrying costs" (i.e., fees and interest amounts) from IESO during the "inflationary cap period" from July 1, 2017 to April 30, 2021.

Tim Hindmarch-Watson
Policy Advisor
Justice, Resource and Environmental Policy
Policy and Delivery Division
Cabinet Office
416-325-4618

REG-11654_ID51067_LRC_CBN-DRAFT-V10.pdf

CABINET BRIEFING NOTE
AND LRC RECOMMENDATION

Energy
Fair Hydro Plan Implementation

DRAFT

Based on draft materials

Cabinet (info) Feb 15, 2017	TB/MBC and Cabinet March 1, 2017	Announcement March 2, 2017	TB/MBC May 9, 2017	Cabinet May 10, 2017
Introduction May 11, 2017	Royal Assent June 1, 2017	TB/MBC June 27, 2017	Cabinet (DTC) June 14, 2017	Cabinet (DTC) June 27, 2017
Program Effective Date July 1, 2017	TB/MBC September 25, 2017	Cabinet September 27, 2017	Cabinet (LRC~~DTC~~) October 30~~18~~, 2017 (TBC)	

Formatted: Highlight

Formatted: Highlight

Summary of Proposal

The proposed regulations are consistent with Cabinet direction.

Context for Decision:

On March 2, 2017, the government announced Ontario's Fair Hydro Plan (OFHP). One component of the OFHP is refinancing a portion of the Global Adjustment (GA). The implementing legislation for GA refinancing, the *Ontario Fair Hydro Plan Act, 2017* (OFHPA), which is Schedule 1 under the *Fair Hydro Act, 2017* (FHA), was introduced May 11, 2017 and received Royal Assent on June 1, 2017. The OFHP expands the powers of Ontario Power Generation (OPG), the Ontario Energy Board (OEB) and the Independent Electricity System Operator (IESO) and puts in place mechanisms including appropriate payment settlement and cost-recovery authorities for and through the IESO to manage the deferred GA costs.

On June 14, 2017 new regulations were created under the OFHPA that support calculations related to GA refinancing and one regulation was amended to authorize IESO to ~~borrow to~~ fund the regulatory asset as part of the financing structure. On June 27, 2017, a new general regulation (Ontario Regulation 206/17) was created under the OFHPA that details the roles and responsibilities of the Financial Services Manager (i.e., OPG), IESO and OEB.

Commented [MK(1]: Is this the reg that is being amended?

Commented [AL2]: Response: Yes- have inserted the number for more clarity

Proposal:

This proposal is the next step in the implementation of GA refinancing. The Ministry of Energy (ENERGY) is proposing amendments to O. Reg. 206/17 ~~(i.e., general regulation)~~ under the OFHPA that would:

1. Enable OPG, as Financial Services Manager (FSM) to establish and charge fees~~, once approved by the OEB,~~ for the services it provides as part of the government's approach to GA refinancing. It would also provide the methodology for the calculation of those fees and would define the role of the OEB in reviewing and approving those fees.

2. Enable OPG, as FSM to recover "carrying costs" (i.e., fees and interest amounts) from IESO during the "inflationary cap period" from July 1, 2017 to April 30, 2021.

Why does Ontario need these changes? Why now?

Addressing rising electricity prices is among the highest priorities for Ontarians. The OEB adjusted rates to reflect the OFHP reductions partially on May 1, 2017 and fully on July 1, 2017. The IESO has been managing the GA deferral with its existing resources since reductions have been in place. As such, it is important for the proposed amendments to take effect in a timely manner to enable OPG to go to market to fund the GA deferral by transferring the regulatory asset to the OPG financing entity (i.e., Fair Hydro Plan Trust). ENERGY understands that OPG intends to go to market in November/December 2017 and is currently in preliminary discussions with rating agencies with respect to timing and other aspects of its FSM role.

How will this proposal impact Ontario?

Under the OFHPA, which enables GA refinancing, electricity bills for a typical residential consumer have been reduced by 25 percent effective July 1, 2017, compared to what they would have been without the initiatives included in the OFHP. The OFHPA also provides that further increases to electricity bills for a typical consumer are to be held to the rate of inflation.

The proposed amendments would support the implementation of the OFHP, which affects all "specified consumers," as defined in the OFHPA, to whom the "Fair Adjustment" applies. Prescribed consumers include residential consumers, farms, small businesses, condominiums, long-term care homes and co-operative housing. These ~~are primarily~~include consumers eligible for the Regulated Price Plan (RPP). Eligibility is ~~, and~~ aligneds with the eligibility under the *Ontario Rebate for Electricity Consumers Act, 2016* (ORECA). ENERGY notes that up to 500,000 small businesses and farms are benefitting from GA refinancing.

What is the expected cost to government?

The GA refinancing structure was designed to result in: (1) increase in provincial gross debt (to finance the equity injection in OPG) offset by an equivalent in regulatory assets

Commented [TR(3]: Is TB/MBC approval required?

Commented [AL4]: Response: No

Commented [TR(5]: Are the proposed amendments expected to have any ratepayer impacts, for example through FSM fees? Can estimated impacts be provided?

Commented [CD(6]: A separate rate impact for the fees has not been calculated. They will be recovered from ratepayers along with principal and interest related to the OFHP during the recovery period.

Commented [TR(7]: Can estimated fees range that the FSM could charge be provided?

Commented [CD(8]: Initial estimates from OPG prior to the drafting of the reg suggest that fees could be in the range of $36M over the first four years and about $300M over the life of the plan.

resulting in no change in net debt, and (2) an increase in interest on debt paid by the province offset by higher earnings from OPG resulting in no impact on annual deficit of the province. The proposed amendments to O. Reg. 206/17 ~~regulations~~ would support the implementation of this refinancing structure. According to ENERGY, the proposed amendments would not involve a direct fiscal impact on the finances of the province.

Allowing OPG to recover carrying costs from IESO during the "inflationary cap period" from July 1, 2017 to April 30, 2021 is expected to have no net impact to specified consumers within this period. As with other costs under the scheme, these costs would be deferred to future collection from specified consumers on and after May 1, 2021.

What are the key steps to deliver this proposal?

The proposed regulations would take effect on the date they are filed. ~~[NTD: placeholder for timelines]~~.

Amendments would provide further detail on the roles and responsibilities of the OPG, IESO and OEB with respect to GA refinancing. Key steps for the delivery of this proposal include:

- OPG to produce Financing Plans that set out funding obligations for each reference period consistent with the Fair Allocation Amount (FAA).
- IESO to record deferral amounts in relation to the establishment of the regulatory asset.
- OPG to begin purchasing monthly regulatory assets from the IESO, expected in ~~November~~ November/December 2017, and work with lenders and credit rating agencies in establishing vehicles for securitizing (selling) of investment asset interests.
- OPG management fees and interest costs (i.e. carrying costs) to be recovered from IESO July 1, 2017 to April 30, 2021.
- IESO to record FSM carrying costs in the variance account established in the legislation, to be included as part of the regulatory asset.
- OPG management fees and interest costs to be recovered by specified consumers through Clean Energy Adjustments (CEAs) on and after May 1, 2021.
- OEB to review and approve OPG management fees as per the methodology established in regulation ~~and determine the rates that will be applied to specific consumers beginning in 2018/2019~~.

How will the changes be communicated?

[NTD: CO Comms to provide]

Notes and Recommendation from LRC

N/A – item proceeding direct to Cabinet.

Commented [TR(9]: Is ENERGY requesting an exemption from the Twice Annual Effective Date?

Commented [AL10]: Response: Yes

Formatted: Highlight

Formatted: English (United States), Highlight

Formatted: Highlight

Commented [TR(11]: Please confirm

Commented [TR(12]: CO Comms to review

Formatted: Border: Bottom: (Single solid line, Auto, 0.5 pt Line width)

Cabinet Office Analysis

The Ministry of Energy's (ENERGY) proposed amendments to O.Reg. 206/17 are consistent with Cabinet direction provided for the implementation of GA refinancing as part of Ontario's Fair Hydro Plan (OFHP) on March 1, 2017. The ~~*Fair Hydro Act, 2017*~~ ~~(~~OFHPA~~)~~ establishes the framework to refinance a portion of current Global Adjustment (GA) costs as part of the OFHP. The OFHP reduced a typical residential consumer's electricity bills by 25 per cent effective July 1, 2017, compared to what they would have been without the initiatives under the Plan. The refinancing methodology defers a portion of current GA costs to future ratepayers in order to allocate costs across present and future generations of electricity consumers with respect to investments made to decarbonize (i.e., phase-out coal) and modernize Ontario's electricity system (i.e., build and maintain a reliable electricity system).

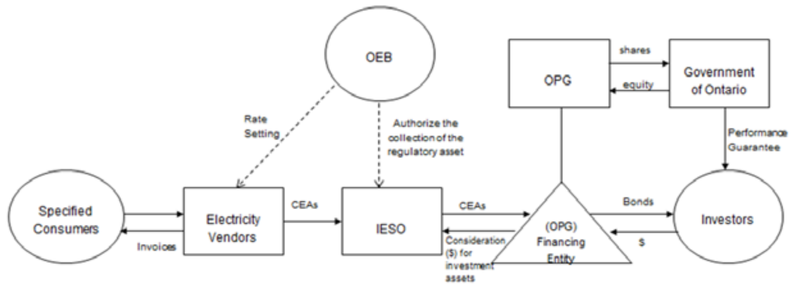
Refinancing Structure

Under the GA refinancing structure, the Independent Electricity System Operator (IESO) records the GA cost recovery deferral as a "regulatory asset" ~~(regulated by the Ontario Energy Board (OEB))~~ to be collected at a future time from "specified consumers" ("the Fair Adjustment" and "IESO deferral"). As a result, specified consumers will receive a reduction in electricity rates from July 1, 2017 to June 30, 2018. The IESO may then sell the regulatory asset, at which time it becomes an "investment asset."

The Minister of Energy, following the principles in the Act and regulations, will regularly calculate the "Fair Allocation Amount" to ensure a proper alignment of the allocation of the intergenerational costs and benefits in relation to each of the next 60 six month "reference periods." Based on the Fair Allocation Amount, the Financial Services Manager (OPG), through financing entities, will debt finance a portion of the GA costs. The financings will be backed primarily by the clean energy adjustments payable by specified consumers. The clean energy adjustments will track the actual payment obligations incurred by the financing entities when they become due and payable.

OPG, in its role as the Financial Services Manager (FSM), will calculate the aggregate clean energy adjustment payable in each month of the reference period, and, to ensure intergenerational fairness, these amounts will be managed to ensure consistency with the fair allocation amounts. OEB will calculate the rates at which the clean energy adjustment will be collected from specified consumers.

To recoup the costs associated with the fair adjustment, consumers will be invoiced the clean energy adjustment on their electricity bills through existing IESO and Local Distribution Companies' (LDC) processes, which will be channeled through to pay each financing entity's related funding obligations. The clean energy adjustments will appear on customer's bills once repayment of the accumulated debt begins.



Note: CEAs are "clean energy adjustments".

Proposal

In its capacity as FSM under the GA refinancing structure, OPG will take on the risk and responsibility of financing the deferral by purchasing monthly regulatory assets from IESO. OPG will finance these purchases through a combination of an equity investment by the Province and external private sector financing. The proposed regulatory amendments would enable OPG to go to market to fund the GA deferral:

Management Fees: As FSM, OPG is allowed to charge a ~~management~~ fee for its services in relation to the establishment, management and administration of the financing entity and the investment asset.

~~made up of a base fee, variable fee and Third-party costs (e.g. banking fees). The proposed amendments to O.Reg. 206/17 would establish a methodology for calculating and reviewing FSM management fees~~~~T~~The proposed ~~new~~ amendments to O. Reg. 206/17 would, if approved, enable OPG to establish and charge fees in its role as FSM, and would also provide the methodology for the calculation of those fees, and define the role of the OEB in reviewing and approving those fees.

The proposed amendments split the fees into three periods as follows:

- For the period from June 1, 2017 to December 31, 2017 – ~~proposed amendments would enable OPG to establish~~ a general fee, comprised of a lump sum payment of $3.1 million plus costs and expenditures, incurred during the June to December period. OPG advises that to meet its accounting requirements that the $3.1 million lump sum payment ~~accounts for costs incurred by OPG prior to June 1, 2017~~is intended to ensure that OPG operates on a "commercial basis" for the first seven month~~syear~~ of the plan.~~, at which time the OFHPA received Royal Assent~~ ~~Such c~~In particular, this amount is meant to offset the costs incurred prior to Royal Assent on June 1, 2017, which are not ~~an~~accounted for ~~eligible~~as a -cost or expenditure as defined in the regulation.

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Formatted: List Paragraph,Bulleted Paragraph,Bullet List 1,Heading 4 test,BN 1,Indented Paragraph,Unordered List Level 1,MOU List Number i,Chart Title,List Paragraph1,Recommendation,List Paragraph11,L,List Paragraph2,CV text,Table text,F5 List Paragraph,Dot pt, Bulleted + Level: 1 + Aligned at: 0.63 cm + Indent at: 1.27 cm

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

~~The proposed amendments establish a methodology for the OEB to review and approve the general fee for the June 1, 2017 to December 31, 2017 period, including by considering whether costs and expenditures were incurred by OPG in relation to the establishment, management and administration of the financing entity and investment asset.~~

- For the period from January 1, 2018 to March 31, 2019 – ~~proposed amendments would provide~~ a ~~methodology for the establishment, review, and approval of a~~ general fee, made up of a base fee ~~at a~~ set at~~of~~ 7.5 basis points and a variable performance-based fee.

- ~~and f~~For the period from April 1, 2019 to March 31, 2020 and subsequent years – a base fee set at rate based on comparable service providers and a variable performance-based fee. ~~Methodologies would account for amount of debt issued, OPG's performance, and fees charged for comparable services.~~

~~From January 1, 2018 on, costs and expenses will be recovered on a calendar year basis, following submission to the OEB of audited statements that show that all expenses relate to the OFHP.~~ Proposed amendments would also establish the role of the OEB in reviewing and approving the fees for each period.

From January 1, 2018 on, costs and expenditures will be recovered on a calendar year basis, following submission to the OEB of audited statements that show that all expenses relate to the OFHP.

~~, including by considering . OPG's base fee for 2017/18 would be established at 7.5 basis points. The OEB would be responsible for determining FSM management fees for future years by reviewing fees for comparable services.~~ Initial OPG estimates calculated prior to the drafting of amendments to O. Reg. 206/17 suggest that fees could be in the range of $3~~5~~6 million for the~~his~~ inflationary cap period. The actual fees will depend on the performance of OPG, the amount of debt issued and the amount of ~~third party costs~~OPG costs and expenditures.

Carrying Costs: OPG must recover management fees and interest costs ~~(i.e., "Carrying Costs")~~ ~~beginning July 1, 2017~~during the inflationary cap period to ensure the implementation of GA refinancing satisfies accounting requirements.

These costs however, cannot be recovered from specified consumers, ~~during the "inflationary cap period" from July 1, 2017 to April 30, 2021~~ in accordance with the commitment to hold electricity bill increases to the rate of inflation for four years. ~~order for GA refinancing to proceed as planned under the OFHPA without incurring significantly increased costs.~~ The proposed amendments to O.Reg. 206/17 would enable the recovery of these costs by OPG from the IESO during this period. The proposed amendments also enable IESO to record such amounts in the variance account, as established in the OFHPA, to be included as part of the regulatory asset to be transferred to the FSM.

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Commented [TR(13]: Please confirm and provide rationale for this fee structure

Formatted: Highlight

Formatted: Highlight

Commented [TR(14]: Would the OEB also have a role in determining fees beyond the base fee? Would fees be determined through the OEB's hearing process?

Commented [AL15]: Response: OEB will have a role in reviewing the variable fee as well.

Commented [TR(16]: Please confirm

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Formatted: Highlight

Commented [TR(17]: Please confirm

Commented [TR(18]: Please confirm total expected amount for costs during this period, $500k-1M?

Formatted: Highlight

Ministry of Energy estimates for the interest costs and fees during this time are approximately $1 billion. These costs ~~would form part of the variance account for future collection from specified consumers and~~ would be recovered from specified consumers through the CEAs on and after May 1, 2021.

Stakeholder response:

ENERGY consulted with representatives from the OEB, IESO an OPG, as well as external advisors (i.e., lawyers and accountants) and other ministries as appropriate on the proposed regulatory amendments. Consistent with the approach taken to develop and implement the OFHPA, a steering committee chaired by ENERGY's Deputy Minister met bi-weekly on the status of the proposed regulatory amendments. The committee consists of senior executives from ENERGY, Cabinet Office, Ministry of Finance, Treasury Board Secretariat, Ontario Financing Authority, OPCD, OPG, OEB and IESO.

General public (Neutral) – Generally supports the GA refinancing initiative, but also question the longer term implications. Some individuals and organizations perceive the GA smoothing as unduly burdening future generations.

OPG (in its role as FSM) – OPG is supportive of a methodology that will enable the recovery of management fees and costs and satisfy accounting requirements.

OEB – In relation to the review and approval of FSM fees, OEB is supportive of an approach that clearly defines the roles and responsibilities of the Board.

IESO – IESO is supportive of an approach that will allow for the recovery of FSM fees and interests costs during the inflationary cap period.

Risks:

OPG/SPV Mechanism

There are several risks associated with the OPG/SPV mechanism that remain. OPG/SPV could continue to be criticised for not having an appropriate level of accountability to the government or the public, due to the limited amount of government control of the entity, and future rate increases. However, this is seen by the markets as an essential component for the structure to operate and the government remains the sole shareholder of OPG.

Proposed regulations build on a complex financing structure that is unique to Canada—uniqueness reduces likelihood of all risks being known/mitigated. Highly specialized expertise has been required to get to this point. Financing is still not certain.

The development of the proposed amendments was preceded by extensive consultation with representatives from OEB, IESO and OPG, as well as their external advisors (i.e., lawyers and accountants). External OPG and IESO accounting advisors confirm that

Commented [TR(19]: What is the OEB's view on the proposed amendments?

Commented [TR(20]: What is the IESO's view on the proposed amendments?

Commented [TR(21]: Are there any risks associated with the proposed management fees, for example rate impact or perception?

Commented [TR(22]: Are there any accounting risks associated with the proposed amendments?

Commented [TR(23]: Are the amendments expected to have an impact on the financeability/saleability of the investment asset?

Commented [TR(24]: Do the proposed amendments introduce any new risks with respect to the OPG/SPV mechanism?

Commented [TR(25]: Does the role of the OEB in overseeing OPG fees take into account the risk that OPG could make the case to be exempted from compensation rules because there is no national comparator for this aspect of their work?

amendments to Ontario Regulation 206/17 will be sufficient to satisfy accounting requirements.

The fee structure is designed to ensure that both the legislative requirement for OEB review and OPG accounting requirements are met, while providing protection for ratepayers through the performance-based variable fee.

Legal

In principle, refinancing the GA to spread the costs of generation and conservation assets over the useful life of the assets present only a low risk of being an unconstitutional tax, as each cohort of consumers pays for a proportion of the GA cost roughly equal to the proportion of the benefit they receive from the useful life of the assets. Legal risk arises if it becomes apparent that the Government is not spreading cost so that it is shared proportionately by future consumers who cause a need for or benefit from the asset, but rather is doing so in order to lower the price in the short term by increasing the price in the long term.

The legislation contains provisions to mitigate the constitutional law risks, including requiring the Minister of Energy to reallocate estimated clean energy costs attributable to each reference period in a way that takes into account the need to align those costs with the estimated clean energy benefits attributable to the same period.

Linkages:

Long-Term Energy Plan (LTEP) – Ontario is preparing to release a new LTEP in October / November 2017. The LTEP identifies needs for investments over the shorter term, while broadly mapping out the direction of the sector over a 20 year timeframe. The LTEP is intended to balance the principles of affordability, reliability, clean energy, community and Indigenous engagement, as well as conservation and demand management.

Electricity Rate Mitigation Initiatives – The *Ontario Rebate for Electricity Consumers Act, 2016*, (ORECA) put in place a rebate for an amount equivalent to the 8% provincial portion of the HST for eligible residential, small business customers and farms, beginning January 1, 2017.

Rural and Remote Rate Protection (RRRP) and Delivery Rate Protection (DRP) – RRRP and DRP help to offset the higher costs to distribute electricity to Ontario residents who live in rural or remote locations all across the Province. DRP was established under the FHA and regulations approved June 14, 2017. Both the expanded RRRP and DRP were implemented July 1, 2017.

The Ontario Clean Energy Benefit (OCEB) – Was a five-year legislated program put in place as a broad-based, transitional measure to a cleaner electricity system. OCEB was also put in place following the implementation of the Harmonised Sales Tax (HST).

Unlike the previous provincial Retail Sales Tax (RST), the HST (and GST) included electricity in the taxable base. OCEB program ended on December 31, 2015.

Debt Retirement Charge – On January 1, 2016, the government ended the electricity DRC on residential users, which was earlier than previously estimated. For all other consumers the DRC will be removed by April 2018, also earlier than previously estimated.

Industrial Conservation Initiative (ICI) – Implemented in January 2011 to help large industrial consumers reduce electricity costs by reducing consumption in peak periods. As part of OFHP, ICI eligibility has been expanded several times, and was most recently expanded to allow for the participation of the manufacturing and, e.g., greenhouse sectors with an average month peak demand greater than 500 kilowatts (kW) and less than or equal to 1 megawatt (MW). ICI provides a benefit to all consumers by decreasing the need for costly peaking generation over the long term.

Affordability Fund – Approved as part of OFHP, and under development, the Affordability Fund is intended to provide energy efficiency measures to Ontarians who are not eligible for low income conservation programs, and who are otherwise unable to make energy efficiency improvements without financial assistance.

Ontario's Climate Change Action Plan (CCAP) – The CCAP, released in summer 2016, reiterated the 2016 Budget commitment and stated that Ontario intends to invest in initiatives that both reduce greenhouse gas (GHG) emissions and ensure that the net impact of cap and trade would not result in an overall increase in electricity costs for commercial and industrial consumers, and that there would be a modest benefit of up to $2 per month, on average, to residential consumers. This commitment to residential consumers was exceeded by the January 2017 8% rebate.

Other Jurisdictions:

~~According to ENERGY, no other jurisdictions have comparable legislative and regulatory frameworks. The U.S. does have examples of securitizations involving single distribution companies, but none of the transactions would have approached the level of complexity involved with the present OFHPA initiative.~~
This financing structure is similar to several jurisdictions in the U.S., and uses a form or securitization that is commonly used in the financial markets.

The recognition of regulatory assets brings IESO in line with 6 other independent system operators in North America, including AESO, ISO New England, NYISO, MISO, PJM and ERCOT.

Commented [HS(26]: Can we revise this in light of what we've been saying at and since the technical briefing re the AG report.

Formatted: Highlight

Formatted: English (United States)

Terms you need to know

- **Global Adjustment (GA) –** The GA accounts for the difference between generation costs (contracted and rate-regulated) and the wholesale market price in order to recover fixed costs, including capital costs, of putting in place and operating Ontario's generation fleet, as well as the cost of conservation and demand management programs. The GA is instrumental in maintaining a reliable electricity system by ensuring that sufficient generating capacity is available.

- **Local Distribution Companies (LDCs) –** Local electricity utilities, responsible for distributing power from transmission lines to people's homes (e.g., Hydro Ottawa, Toronto Hydro, etc.) LDCs recover their costs through distribution rates. LDCs are licensed to serve a specific geographic area by the Ontario Energy Board (OEB). An LDC must receive OEB approval to charge a distribution rate.
- **Regulated Price Plan (RPP) –** Since April 2005, the Ontario Energy Board (OEB) has administered an electricity price plan that provides stable and predictable electricity pricing, encourages conservation and ensures the price consumers pay for electricity better reflects the price paid to generators. This pricing plan is known as the Regulated Price Plan (RPP). About 5 million residential consumers, small businesses and farms are eligible for the RPP.
- **Ontario Power Generation (OPG) –** A business corporation owned by the Province that owns and operates generation assets, including nuclear and hydro, and generates almost half of Ontario's electricity.
- **Ontario Energy Board (OEB) –** A Crown Agency that independently regulates Ontario's electricity and natural gas sectors in the public interest. Implements an open and transparent process to allow for stakeholders to participate in quasi-judicial proceedings and formal stakeholder consultations.
- **Independent Electricity System Operator (IESO) –** An independent corporation established under the *Electricity Act, 1998* that operates the electricity market in Ontario. Balances the supply of and demand for electricity in Ontario and then directs its flow across the province's transmission lines, including interties with other jurisdictions.

reg2017 0512 e10 shared with OPG and OEB Oct2.pdf

PROPOSED ONTARIO REGULATION

made under the

ONTARIO FAIR HYDRO PLAN ACT, 2017

FEES

Definitions

1. (1) In this Regulation,

"average monthly funding obligation" means, in respect of a month, the amount determined in accordance with subsection (2);

"average annual funding obligation" means, in respect of a year, the sum of the average monthly funding obligations for the year;

"funding tranche" means an issuance of funding obligations of a particular class or type, all of which have the same terms, but does not include an issuance of a funding obligation to the Financial Services Manager;

"market comparable fees" means fees, expressed as an annual percentage rate, charged by full-service managers of funds, including securitization vehicles, pension funds and other investment funds, hedge funds or other similar funds, in Canada or another jurisdiction in North America that is determined by the Board, for services that are similar to the services provided by the Financial Services Manager under the Act in terms of,

(a) the type of services provided,

(b) the scope of services provided,

(c) the level of services provided, and

(d) the dollar amount of assets under management;

"market comparable forecast interest rates" means, in relation to a funding tranche, interest rates for a debt obligation that,

(a) has a principal amount that is comparable to the principal amount of the funding tranche,

(b) has a term that is comparable to the term of the funding tranche,

(c) is based on a type of instrument that is comparable to the type of instrument of the funding tranche,

(d) has payment rights that are similar to the payment rights of the funding tranche, and

(e) is issued by an issuer with a risk profile comparable to the risk profile of the financing entity issuing the funding tranche;

"net annual funding obligation" means, in respect of a year, the sum of the principal amounts of funding tranches issued in the year, other than any funding tranches that constitute a refinancing.

(2) For the purposes of determining the average monthly funding obligation for a month, the following formula applies:

$$(A + B) / 2$$

Where,

A = the sum of the balances on the first day of the month of the principal amount of all outstanding funding obligations incurred by financing entities,

B = the sum of the balances on the last day of the month of the principal amount of all outstanding funding obligations incurred by financing entities.

Fees that may be established, charged

2. (1) For the purposes of subsection 19 (3) of the Act, the fees established and charged by the Financial Services Manager may be charged to financing entities in relation to the establishment, management and administration of financing entities and the investment asset, including in relation to funding obligations incurred or that are planned to be incurred by the financing entities, and in relation to financing entities established or that are planned to be established.

(2) The Financial Services Manager shall not establish or charge any fees to financing entities other than those fees provided for under this Regulation.

GENERAL FEE FOR 2017

Submission re general fee for 2017

3. (1) The Financial Services Manager shall submit to the Board, on or before February 28, 2018, the proposed fee for the period beginning on June 1, 2017 and ending on December 31, 2017.

(2) The proposed fee shall be [$3 million] plus the amount of any costs and expenditures incurred during the period mentioned in subsection (1) by the Financial Services Manager in relation to the establishment, management and administration of financing entities and the investment asset, including costs and expenditures,

ENE LSB note: OPG to confirm amount.

(a) in relation to funding obligations incurred or that are planned to be incurred by the financing entities;

(b) in relation to financing entities that are established or planned to be established;

(c) on behalf of any financing entity in connection with the Financial Services Manager's duties under the Act in relation to the financing entity; or

(d) incurred in relation to a management agreement between the Financial Services Manager and any financing entity, where the agreement provides for the reimbursement of the costs and expenditures.

(3) The costs and expenditures referred to in subsection (2) may include costs and expenditures in respect of the following:

1. Underwriters or selling agents for funding obligations.
2. Banking fees, including structuring fees or work fees.
3. Fees of issuing and paying agents for funding obligations.
4. Fees of trustees.
5. Fees incurred in the preparation of financial statements, financial reports, compliance certificates and tax returns.
6. Fees of legal counsel.
7. Rating agency fees.
8. Filing or registration fees.
9. Direct costs of the Financial Services Manager for employees whose work for the Financial Services Manager consists exclusively of the provision of the services described in subsection 2 (1) to financing entities.

(4) The submission shall include written confirmation from the Financial Services Manager's external auditor or another external auditor of the following:

1. That the amounts of the costs and expenditures that the Financial Services Manager seeks to recover through fees, as set out in the submission, are accurate.

2. That the amounts of the costs and expenditures, as set out in the submission, were incurred by the Financial Services Manager.

3. That, except in the case of amounts referred to in paragraph 9 of subsection (3), the amounts were paid or payable to third parties.

Board review of general fee for 2017

4. (1) The Board may,

(a) approve the fee proposed under section 3; or

(b) subject to subsection (2), refuse to approve all or a portion of the amount included in the proposed fee relating to any costs and expenditures and approve the remainder of the proposed fee.

(2) The Board may refuse to approve all or a portion of an amount relating to costs and expenditures if the Board is of the view that it was not incurred in relation to the establishment, management and administration of financing entities and the investment asset, including costs and expenditures described in clauses 3 (2) (a) to (d).

Charging of general fee for 2017

5. (1) If the Board approves a fee under section 4, the fee is payable no later than 30 days following the last day of the month following the month in which the Board's approval is given.

(2) Where there is more than one financing entity, the portion of the fee allocated to and payable by a financing entity shall be based on a reasonable allocation as determined by the Financial Services Manager.

GENERAL FEE FOR JANUARY 1, 2018 TO MARCH 31, 2019

Submission re general fee for January 1, 2018 to March 31, 2019

6. (1) The Financial Services Manager shall submit to the Board, on or before December 15, 2017, the proposed fee for the period beginning on January 1, 2018 and ending on March 31, 2019.

(2) The Financial Services Manager shall establish the proposed fee for the period mentioned in subsection (1) as follows:

1. Apply the following formula in respect of each funding tranche that forms part of the sum of the principal amounts of funding tranches issued in the period, other than any funding tranches that constitute a refinancing:

$$(A \times (B - C)) \times 0.10$$

Where,

A = the principal amount of the funding tranche,

B = the forecast interest rate for the funding tranche, and

C = the actual interest rate for the funding tranche.

2. Calculate the sum of the amounts determined by applying the formula under paragraph 1.

3. Calculate the amount that is 0.09375 per cent of the average monthly funding obligation for each month in the period mentioned in subsection (1).

4. Calculate the sum of the amount determined under paragraph 2 and the amounts determined under paragraph 3.

(3) Despite paragraph 1 of subsection (2), if the circumstances set out in Column 1 of the following Table apply during the period mentioned in subsection (1), the rules set out opposite those circumstances in Column 2 of the Table apply:

Item	Column 1 Circumstances	Column 2 Rules
1.	The sum of the average monthly funding obligations for the period is $10 billion or less.	The result under paragraph 2 of subsection (2) shall be adjusted to an amount that is not more than 1 per cent of the amount that is 5 per cent of the sum of the principal amounts of funding tranches issued in the period, other than any funding tranches that constitute a refinancing. The result under paragraph 2 of subsection (2) shall be adjusted to an amount that is not less than -1per cent of the amount that is 5 per cent of the sum of the principal amounts of funding tranches issued in the period, other than any funding tranches that constitute a refinancing.
2.	The sum of the average monthly funding obligations for the period is greater than $10 billion.	The result under paragraph 2 of subsection (2) shall be adjusted to an amount that is not more than 2 per cent of the amount that is 5 per cent of the sum of the principal amounts of funding tranches issued in the period, other than any funding tranches that constitute a refinancing. The result under paragraph 2 of subsection (2) shall be adjusted to an amount that is not less than -2 per cent of the amount that is 5 per cent of the sum of the principal amounts of funding tranches issued in the period, other than any funding tranches that constitute a refinancing.

(4) If, subsequent to the initial submission to the Board under subsection (1), the Financial Services Manager determines that a funding tranche may be issued that was not contemplated in the initial submission, the Financial Services Manager may notify the Board and submit a

forecast interest rate for that funding tranche later than November 15, 2017 but before such date as may be specified by the Board.

(5) The Board may, instead of specifying a date for the purposes of subsection (4), determine the forecast interest rate for the funding tranche, having regard to the forecast interest rates submitted by the Financial Services Manager for other funding tranches anticipated to be issued in the period.

Board review of general fee

7. (1) The Board may,

(a) approve the fee proposed under section 6; or

(b) refuse to approve the fee if the Board is of the view that any forecast interest rate used for the purposes of paragraph 1 of subsection 6 (2) is materially inconsistent with market comparable forecast interest rates.

(2) If the Board refuses to approve the proposed fee,

(a) the Board may make recommendations to the Financial Services Manager regarding each forecast interest rate that the Board found was inconsistent with market comparable forecast interest rates; and

(b) the Financial Services Manager shall submit to the Board,

(i) a revised proposed fee that takes into consideration the recommendations of the Board, if any, and

(ii) a description of the methodology that the Financial Services Manager has applied to determine revised forecast interest rates for each funding tranche in respect of which the Board found an inconsistency with market comparable forecast interest rates.

(3) If the Financial Services Manager submits a revised proposed fee, this Regulation applies, with necessary modifications, to the submission as if it were the initial submission.

Charging of general fee

8. (1) If the Board approves a fee under section 7,

(a) subject to subsection (2), each monthly amount determined under paragraph 3 of subsection 6 (2) is payable no later than the last day of the month following the month in respect of which the amount was determined; and

(b) all other amounts are payable no later than 30 days following the later of March 31, 2019 and the last day of the month in which the Board's approval is given.

(2) If the Board approves a fee under section 7 after January 1, 2018, each of the monthly amounts referred to in clause (1) (a) is payable no later than the later of,

(a) the last day of the month following the month in respect of which the amount was determined; and

(b) the last day of the month following the month in which the Board's approval is given.

(3) Where there is more than one financing entity, the portion of the fee allocated to and payable by a financing entity shall be based on a reasonable allocation as determined by the Financial Services Manager.

FEE FOR APRIL 1, 2019 TO MARCH 31, 2020 AND SUBSEQUENT YEARS

Submission re base and variable fees for 2019-2020, subsequent years

9. (1) The Financial Services Manager shall submit to the Board, on or before February 28, 2019 and on or before February 28 in each subsequent year, the proposed base fee and variable fee for the period beginning on April 1 in the year of the submission and ending on March 31 in the following year.

(2) In this section and sections 10 to 13, a reference to a "year" means the 12-month period beginning on April 1 and ending on the following March 31.

Base fee

10. (1) The Financial Services Manager shall establish a proposed base fee mentioned in subsection 9 (1) for each month in a year by determining the amount that it considers to be consistent with market comparable fees, expressed as a percentage of the average monthly funding obligation for the preceding month.

(1.1) The Financial Services Manager shall determine the amount that it considers to be consistent with market comparable fees by applying the following rules:

1. Subject to paragraph 2, the Financial Services Manager shall determine the average of at least five fees that satisfy the definition of "market comparable fee" in subsection 1 (1).

2. If the Financial Services Manager is not able to determine the average of five fees for the purposes of paragraph 1, the Financial Services Manager shall determine the average of as many fees as possible.

3. Subject to paragraph 4, the Financial Services Manager shall ensure that at least 80 per cent of the fees included in the average are fees charged by full-service managers of securitization vehicles.

4. If the Financial Services Manager is not able to ensure that at least 80 per cent of the fees meet the description set out in paragraph 2, the Financial Services Manager shall ensure that the highest percentage possible of the fees included in the average meets that description.

(2) The Board may,

(a) approve the proposed base fee; or

(b) subject to subsection (3), refuse to approve the proposed base fee if the Board is of the view that the proposed base fee is materially inconsistent with market comparable fees.

(3) When determining whether the proposed base fee is materially inconsistent with market comparable fees, the Board shall apply the rules set out in subsection (1.1).

(4) If the Board refuses to approve a proposed base fee,

(a) the Board may make recommendations to the Financial Services Manager regarding the determination of a base fee that is consistent with market comparable fees; and

(b) the Financial Services Manager shall submit to the Board,

(i) a revised proposed base fee that takes into consideration the recommendations of the Board, if any, and

(ii) a description of the methodology that the Financial Services Manager has applied to determine the revised proposed base fee, including details concerning the market comparable fees that the Financial Services Manager considered.

(5) If the Financial Services Manager submits a revised proposed fee, this section applies, with necessary modifications, to the submission as if it were the initial submission.

(6) If the Board has not approved a proposed base fee by the first day of the year for which the proposed base fee would be charged,

(a) the Financial Services Manager may continue to charge the base fee that was most recently approved by the Board, if any base fee was previously approved; and

(b) the Financial Services Manager shall adjust the base fee in the month following the month in which the Board approves the proposed base fee, to reflect the difference between the base fee charged to date and the base fee approved by the Board for the year to date.

Variable fee

11. (1) The Financial Services Manager shall establish a variable fee mentioned in subsection 9 (1) for a year as follows:

1. Subject to subsection (2), apply the following formula in respect of each funding tranche that forms part of the net annual funding obligation for the year:

$$(A \times (B - C)) \times 0.10$$

Where,

A = the principal amount of the funding tranche,

B = the forecast interest rate for the funding tranche, and

C = the actual interest rate for the funding tranche.

2. Calculate the sum of the amounts determined by applying the formula under paragraph 1.

(2) If the circumstances set out in Column 1 of the following Table apply in a year, the variable fee payable for a year is subject to the rules set out opposite those circumstances in Column 2 of the Table:

Item	Column 1 Circumstances	Column 2 Rules
1.	The average annual funding obligations are $10 billion or less.	The variable fee payable for the year shall not be more than 1 per cent of the amount that is 5 per cent of the net annual funding obligation for the year. The variable fee payable for the year shall not be less than -1per cent of the amount that is 5 per cent of the net annual funding obligation.
2.	The average annual funding obligations are greater than $10 billion.	The variable fee payable for the year shall not be more than 2 per cent of the amount that is 5 per cent of the net annual funding obligation for the year. The variable fee payable for the year shall not be less than -2 per cent of the amount that is 5 per cent of the net annual funding obligation for the year.

(3) The Board may,

(a) approve the proposed variable fee; or

(b) refuse to approve a proposed variable fee if the Board is of the view that any forecast interest rate used for the purposes of subsection (1) is materially inconsistent with market comparable forecast interest rates.

(4) If the Board refuses to approve the proposed variable fee,

(a) the Board may make recommendations to the Financial Services Manager regarding each forecast interest rate that the Board found was inconsistent with market comparable forecast interest rates; and

(b) the Financial Services Manager shall submit to the Board,

(i) a revised proposed fee that takes into consideration the recommendations of the Board, if any, and

(ii) a description of the methodology that the Financial Services Manager has applied to determine revised forecast interest rates for each funding tranche in respect of which the Board found an inconsistency with market comparable forecast interest rates.

(5) If, subsequent to the initial submission to the Board in respect of a year, the Financial Services Manager determines that a funding tranche that was not contemplated in the initial submission, the Financial Services Manager may notify the Board and submit a forecast interest rate for that funding tranche later than February 28 but before such date as may be specified by the Board.

(6) The Board may, instead of specifying a date for the purposes of subsection (5), determine the forecast interest rate for the funding tranche, having regard to the forecast interest rates submitted by the Financial Services Manager for other funding tranches anticipated to be issued in the applicable year.

In-year amendments to base fee or variable fee

12. (1) The Financial Services Manager may, no more frequently than once in any consecutive twelve month period, make submissions to the Board to amend any fees approved by the Board under section 10 or 11, and section 10 or 11 apply, as the case may be and with necessary modifications, in respect of the submissions.

(2) Nothing in subsection (1) authorizes an amendment to a fee that would result in the fee failing to meet the criteria for approval set out in section 10 or 11, as the case may be.

(3) If the Board approves an amendment to a fee under subsection (1), the fee as amended may be charged,

(a) in the case of a base fee, starting in the month following the month in which the Board's approval is given; and

(b) in the case of a variable fee, in respect of funding tranches issued starting in the month following the month in which the Board's approval is given.

Charging of base and variable fees

13. (1) If the Board approves a fee under section 10 or 11,

(a) in the case of a base fee, subject to subsection (1.1), the fee is payable no later than 30 days after the end of the month for which the fee is payable; and

(b) in the case of a variable fee for a year, on the last day of the third month in the following year.

(1.1) If the Board approves a fee under section 10 after March 31, 2019, each of the monthly amounts referred to in clause (1) (a) is payable no later than the later of,

(a) the last day of the month following the month in respect of which the amount was determined; and

(b) the last day of the month following the month in which the Board's approval is given.

(2) If the variable fee for a year is a negative amount, it shall be deducted from the first payments of base fees payable in the following year until the amount has been fully deducted.

(3) Where there is more than one financing entity, the portion of the fees allocated to and payable by a financing entity shall be based on,

(a) in the case of a base fee, the financing entity's proportionate share of the average principal amount of funding obligations for the applicable period; and

(b) in the case of a variable fee, the portion of the variable fee attributable to the funding tranches issued by the financing entity.

FEES FOR COSTS AND EXPENDITURES

Fees for costs and expenditures, submission to Board

14. (1) The Financial Services Manager shall submit to the Board a proposed fee for costs and expenditures,

(a) no later than March 31, 2019, in respect of costs and expenditures incurred during 2018; and

(b) no later than March 31 in each subsequent year, in respect of costs and expenditures incurred during the previous calendar year.

(2) The fee may be established to recover the amount of costs and expenditures incurred by the Financial Services Manager in relation to the establishment, management and administration of financing entities and the investment asset, including costs and expenditures,

(a) in relation to funding obligations incurred or that are planned to be incurred by the financing entities;

(b) in relation to financing entities that are established or planned to be established;

(c) on behalf of any financing entity in connection with the Financial Services Manager's duties under the Act in relation to the financing entity; or

(d) incurred in relation to a management agreement between the Financial Services Manager and any financing entity, where the agreement provides for the reimbursement of the costs and expenditures.

(3) The costs and expenditures referred to in subsection (2) may include costs and expenditures in respect of the following:

1. Underwriters or selling agents for funding obligations.

2. Banking fees, including structuring fees or work fees.

3. Fees of issuing and paying agents for funding obligations.

4. Fees of trustees.

5. Fees incurred in the preparation of financial statements, financial reports, compliance certificates and tax returns.

6. Fees of legal counsel.

7. Rating agency fees.

8. Filing or registration fees.

9. Subject to subsection (4), direct costs of the Financial Services Manager for employees whose work for the Financial Services Manager consists exclusively of the provision of the services described in subsection 2 (1) to financing entities.

(4) Costs referred to in paragraph 9 of subsection (3) are recoverable as costs only if the Board, upon reviewing the submission, determines that those costs as set out in the submission are consistent with the costs recovered by the majority of [full-service? managers] who recover similar costs from persons who are also charged fees in the fiscal year starting in the calendar year to which the submission relates.

(5) The submission shall include written confirmation from the Financial Services Manager's external auditor or another external auditor of the following:

1. That the amounts of the costs and expenditures that the Financial Services Manager seeks to recover through fees, as set out in the submission, are accurate.

2. That the amounts of the costs and expenditures, as set out in the submission, were incurred by the Financial Services Manager.

3. That, except in the case of amounts referred to in paragraph 9 of subsection (3), the amounts were paid or payable to third parties.

Board review of fee for costs, expenditures

15. (1) The Board may,

(a) approve the fee proposed under subsection 14 (1);

(b) subject to subsection (2) refuse to approve all or a portion of the amount included in the proposed fee relating to any costs and expenditures and approve the remainder of the proposed fee.

(2) The Board may refuse to approve all or a portion of an amount relating to costs and expenditures if the Board is of the view that it was not incurred in relation to the establishment, management and administration of financing entities and the investment asset, including costs and expenditures described in clauses 14 (2) (a) to (d).

Charging of fee for costs, expenditures

16. (1) If the Board approves a fee under section 15, the fee is payable no later than 30 days following the last day of the month following the Board's approval.

(2) Where there is more than one financing entity, the portion of the fee allocated to and payable by a financing entity shall be based on a reasonable allocation as determined by the Financial Services Manager.

Commencement

17. This Regulation comes into force on the day it is filed.

QA - AG debt_v0 2.pdf

From:	Hume, Steen (ENERGY)
To:	Christie, Tim (ENERGY); Cayley, Daniel (ENERGY)
Cc:	Cox, Hilary (ENERGY)
Subject:	QA - AG debt_v0 2
Date:	October 17, 2017 3:19:11 PM
Attachments:	QA - AG debt_v0 2.docx

FYI

QA - AG debt_v0 2_1.pdf

<u>Q&A Response</u>

Q: What is the difference between how the Auditor General characterizes the debt and how Government characterizes the debt?

The Auditor General report expresses the principal and interest debt separately over three time periods or phases (i.e., 2017-21, 2021-28 and 2028-45).

The ENERGY debt forecast combines both principal and interest in an accumulated debt calculation which runs over the thirty year lifetime of Ontario's Fair Hydro Plan and is characterised in terms of peak debt.

ENERGY uses the peak debt concept due to the nature of how the debt is accrued.

Under Global Adjustment (GA) refinancing, the debt starts at zero but builds through the inflationary cap period as well as subsequent years before reaching a peak in the 2020s. At that point the debt begins to be repaid until it returns to zero at the end of the thirty year period. This is in contrast to a traditional financing program (i.e., infrastructure spending), where the peak debt is realized at the initialization of the term, and declines to zero over time.

	Interest	***Peak debt***	***Saving if Province funded entire refinancing***
ENERGY 1-March estimate	25.1	27.7	n/a
ENERGY 30-August estimate	18.3	18.5	n/a
AG / FAO report*	21.0	26.2	4.0

Q. Why did the government need to introduce legislation to enact OFHP?

The Fair Hydro Act, 2017 was required to achieve the following

The Fair Hydro Act, 2017 was required to achieve the following:

- Enabling the setting of lower electricity rates for specified consumers leading to a deferral of a portion of clean energy costs;
- Providing a statutory right for the recovery of those costs from future specified consumers;
- Allowing for the sale of the right of recovery of future costs;
- Implementing enhanced existing and new electricity social programs; and
- Shifting funding for certain electricity social programs to the tax base.

The OFHPA provided the Minister with the authority to drive the intergenerational reallocation process through the determination of the fair allocation amounts.

The legislation also sets out the overall framework for determining the fair allocation of clean energy costs over time, establishing Ontario Power Generation as the Financial Services Manager (FSM) and requires the FSM to develop Financing Plans to be submitted to the Minister of Energy.

QA - AG debt_v0.2.pdf

From:	Christie, Tim (ENERGY)
To:	Cox, Hilary (ENERGY)
Cc:	Cayley, Daniel (ENERGY); Macpherson, Robin (ENERGY)
Subject:	QA - AG debt_v0.2
Date:	October 17, 2017 3:00:05 PM
Attachments:	QA - AG debt_v0.2.docx

Hilary, these QAs were requested by Steen for estimates.

QA - AG debt_v0.2_1.pdf

Q&A Response

Q: What is the difference between how the Auditor General characterizes the debt and how Government characterizes the debt?

A: The Auditor General report expresses the principal and interest debt separately over three time periods (2017-21, 2021-28, 2028-45). The ENERGY debt forecast combines both principal and interest in an accumulated debt calculation which runs over the lifetime of the program and characterises in terms of peak debt.

ENERGY uses the peak debt concept due to the nature of how the debt is accrued. Under GA refinancing, the debt starts at zero but builds through the inflationary cap period as well as subsequent years before reaching a peak in the 2020s. At that point the debt begins to be repaid until it returns to zero at the end of the 30-year period. This is in contrast to a traditional financing program (i.e., an infrastructure spend or a mortgage), where the peak debt is realized at the initialization of the term, and declines to zero over time.

	Interest	Peak debt	Saving if Province funded entire refinancing
ENERGY 1-March estimate	25.1	27.7	n/a
ENERGY 30-August estimate	18.3	18.5	n/a
AG / FAO report*	21.0	26.2	4.0

Q. Why did the government need to introduce legislation to enact OFHP?

A. The Fair Hydro Act, 2017 was required to achieve the following:

- Enabling the setting of lower electricity rates for specified consumers leading to a deferral of a portion of clean energy costs
- Providing a statutory right for the recovery of those costs from future specified consumers
- Allowing for the sale of the right of recovery of future costs
- Implementing enhanced existing and new electricity social programs
- Shifting funding for certain electricity social programs to the tax base

The OFHPA provided the Minister with the authority to drive the intergenerational reallocation process through the determination of the fair allocation amounts.

The legislation also sets out the overall framework for determining the fair allocation of clean energy costs over time, establishing Ontario Power Generation as the Financial Services Manager (FSM) and requires the FSM to develop Financing Plans to be submitted to the Minister of Energy.

QA - OPG OFHP Debt FinancingTech Briefing - AH ....pdf

From: Rehob, James (ENERGY)
To: Rehob, James (ENERGY)
Subject: QA - OPG OFHP Debt FinancingTech Briefing - AH - 20180201 - MO-EPE-LSBv2
Date: February 7, 2018 12:34:17 PM
Attachments: QA - OPG OFHP Debt FinancingTech Briefing - AH - 20180201 - MO-EPE-LSBv2 .docx

QA - OPG OFHP Debt FinancingTech Briefing - A_6.pdf

CONFIDENTIAL

Q&A: OPG OFHP Tech Briefing
Ministry of Energy
Key Messages/Questions and Answers
Date: January 25, 2018
Last Reviewed by: ESP

KEY MESSAGES:

- **Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history.**

- **OFHP has lowered electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. The plan includes the 8 per cent rebate introduced in January 2017 and builds on previously announced initiatives to deliver broad-based rate relief on all electricity bills. As many as half a million small businesses and farms are also benefitting from a reduction.**

- **Ontario Power Generation (OPG) has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than original estimates.**

- **Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[1]. The preliminary estimate from March 2017 was about $28 billion[2].**

- **OPG has developed solid investor relationships and has a large investor base in the structured finance space that ~~would be~~is the target market for financing Ontario's Fair Hydro Plan initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors[3], including major investors in the Canadian power and utility bonds market.**

- **Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.**

- **The senior officials and staff were from:**
  - **Ministry of Energy;**
  - **Ministry of Finance;**
  - **Treasury Board Secretariat;**
  - **Office of the Provincial Controller;**
  - **Cabinet Office;**

Commented [NC(1)]: This should be in KMs

Commented [NC(2)]: This should be in KMs

---

[1] Ministry of Energy
[2] Ministry of Energy, submission to Financial Accountability Officer
[3] Ontario Power Generation

  - **Ontario Financing Authority (OFA);**
  - **Independent Electricity System Operator (IESO); and**
  - **Ontario Power Generation Inc. (OPG).**

Commented [NC(3]: Add to KMs

- **~~Ontario Power Generation (OPG)~~OPG has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).**

- **OPG currently manages approximately $20 billion[4] in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts**

- **OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments.**

- **The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.**

[4] Ontario Financing Authority

Qs and As

Q. Why did the government introduce the Ontario Fair Hydro Plan?

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly $70 billion[5] has been invested in the electricity system, including more than $37[6] billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP lowered electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

In developing the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. What is Global Adjustment (GA)?

Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also recovers costs associated with running conservation programs in the province.

GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a reliable supply of electricity.

GA pays for the bulk of the recent investments in the electricity system. The majority of the province's electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that generating assets are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets.

[5] Ministry of Energy, *2017 Long-Term Energy Plan*
[6] Ministry of Energy, *2017 Long-Term Energy Plan*

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Q. Has the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? How much is the program expected to cost?

Ontario Power Generation (OPG) has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than original estimates.

Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[7]. The preliminary estimate from March 2017 was about $28 billion[8].

Commented [NC(4]: This should be in KMs

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty-year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[9] to approximately $20 billion[10]. These estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro Plan? Would it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?

Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).

OPG currently manages approximately $20 billion[11] in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.

OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

OPG has developed solid investor relationships and has a large investor base in the structured finance space that would be the target market for financing Ontario's Fair Hydro Plan initiative. For

[7] Ministry of Energy
[8] Ministry of Energy, submission to Financial Accountability Officer
[9] Ministry of Energy
[10] Ministry of Energy
[11] Ontario Financing Authority

example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors[12], including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than $2 billion[13] and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

Q. How much was spent by OPG to complete this transaction? Will these costs be borne by ratepayers?

~~The government is dedicated to reducing electricity costs wherever possible, while maintaining reliability for all consumers.~~

~~With Ontario's Fair Hydro Plan and as a result of the government's prudent fiscal management, the Ontario government is delivering on its commitment to balance the budget this year, recognizing that balance provides the foundation for the long-term well-being and prosperity of Ontarians.~~

~~To relieve the current burden on ratepayers and share costs more fairly, a portion of the GA is being refinanced. Refinancing the Global Adjustment (GA) will provide significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built.~~

~~In the early years, it is intended that a portion of the costs covered by the GA will be refinanced to reduce pressure on today's electricity ratepayers. In later years, the cost of refinancing will be recovered from ratepayers.~~

OPG was identified as the Financial Services Manager responsible for producing the financing plans and for the financing entity (i.e., Fair Hydro ~~Plan~~ Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

Under the *Ontario Fair Hydro Plan Act, 2017* (the "Act") and associated regulations, OPG is permitted to charge fees as financial services manager, which are calculated based on OPG's performance in managing the debt obligations and allow OPG to recover costs incurred in relation to the establishment, management and administration of the financing entity and/or the investment asset.

In accordance with regulations made under the Act, financial services manager fees incurred on or before July 31, 2021 are recovered from IESO, and recorded in the IESO variance account to form part of the IESO's regulatory asset. In accordance with the structure of Ontario's Fair Hydro Plan, in future years these amounts will be recovered from ratepayers.

Ontario's Fair Hydro Plan is designed to fairly allocate costs across the generations of electricity ratepayers. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system.

Commented [NC(5]: This should be in KMs

Commented [HA(6]: Unfortunately have nothing that can speak to the first part of this question.

Commented [JH7]: Note correct name of financing entity

[12] Ontario Power Generation
[13] Ontario Power Generation

Further questions on OPG costs should be directed to OPG.

Q. Some say you are unfairly placing the burden of debt on future generations through things like Ontario's Fair Hydro Plan, how do you respond?

Future generations will be paying their fair share for a system they will be benefiting from in their lifetime. Not only will they benefit from a reliable electricity system, but also from cleaner air resulting from the elimination of coal-fired generation.

Ontario's Fair Hydro Plan (OFHP) acts much like taking out a new mortgage – providing much-needed relief now by spreading costs across the life of our assets. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Moving forward, Ontario's 2017 Long-Term Energy Plan (2017 LTEP) focuses on continuing to put downward pressure on electricity bills over the long term. Our robust electricity supply puts us in a good position to improve efficiency, increase transparency and enhance opportunities for innovation and competition to further reduce system costs. That is why Ontario's Fair Hydro Plan includes a commitment to improving sector efficiency and modernizing Ontario's electricity market, building on the collaboration of the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).

For example, IESO's Market Renewal initiative will result in a more efficient marketplace with competitive and transparent mechanisms that meet future system needs at the lowest cost. The initiative is expected to save up to $5.2 billion[14] over a 10-year period and forms a key component of Ontario's plan to ensure the affordability of electricity in the longer term.

Q. When will the next tranche of debt be sold?

OPG was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro ~~Plan~~ Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

OPG is expected to purchase the IESO's regulatory asset ~~deferral~~ monthly, and to issue longer term debt in the capital markets on a periodic basis.

~~The *Fair Hydro Act, 2017* enables the Independent Electricity System Operator (IESO) and Ontario Power Generation (OPG) to work together to spread out the costs of Ontario's clean energy investments over a longer period of time, which ensures that the costs of these investments are allocated fairly among current and future ratepayers. This will be accomplished through refinancing a portion of the Global Adjustment (GA), resulting in significant and immediate rate reductions.~~

[14] Independent Electricity System Operator, *Assessment of the Benefits of Market Renewal (Brattle Group)*

~~Under the legislation, OPG has developed a financing plan, which sets out the funding obligations and amounts related to the financing of the deferred GA amounts. The Ontario Energy Board (OEB) will continue its role as regulator for the electricity sector. In particular, it will continue to set commodity rates for Regulated Price Plan (RPP) consumers, including cost reductions under the *Fair Hydro Act, 2017*. Debt and financing costs will be recovered through adjustments to consumer bills.~~

~~Borrowing is expected to be done in tranches, as set out in the Financing Plan developed by OPG.~~

Q. There is an election in 17 weeks. Can the Ontario Fair Hydro Plan be undone? What will that mean for the refinancing of the GA and Ontario ratepayers?

~~The~~ Ontario's Fair Hydro Plan is a function of both legislation and finance, ~~has been developed~~ and its implementation ~~has begun and~~ is ongoing. ~~The Fair Hydro Plan~~ (GA Refinancing) is implemented through ongoing financings that OPG, as the Financial Services Manager, takes to market. ~~Through the Ontario Fair Hydro Plan Act, 2017, each financing is final once the financing has been completed, and cannot be undone until fully repaid.~~ ~~cannot be undone.~~

The *Ontario Fair Hydro Plan Act, 2017* and associated regulations provide the legislative framework for the GA refinancing program and its policy goals, allowing certain electricity system costs to be ~~to~~ fairly allocated across generations of electricity ratepayers. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system.

In accordance with the legislation and associated regulations, Ontario's Fair Hydro Plan ~~is lowering rates~~has lowered electricity bills by 25 per cent on average across the province for ~~all~~ residential customers. As many as half a million small businesses and farms are also benefitting. Increases will be held to the rate of inflation for four years.

~~Under GA refinancing, initial analysis indicates that borrowing would occur for about 10 years. Initial analysis indicates that it is currently anticipated that loans will begin to be paid back in the mid-to-late 2020s. The exact timing will be determined by the markets and other factors as we strive to balance costs and benefits in the fairest way possible. This is a significant change that represents a fair solution to an issue that has unfairly burdened current electricity ratepayers. This does not sacrifice investments in the energy system. We're changing the way electricity costs are recovered, and moving funding for certain social programs off of hydro bills. This plan is delivering the biggest rate reduction in Ontario's history.~~

~~The Ontario Fair Hydro Plan cannot be undone.~~

~~Ontario's Fair Hydro Plan is lowering rates by 25 per cent on average across the province for all residential customers. As many as half a million small businesses and farms are also benefitting. Increases will be held to the rate of inflation for four years.~~

~~Under GA refinancing, initial analysis indicates that borrowing would occur for about 10 years. Initial analysis indicates that it is currently anticipated that loans will begin to be paid back in the mid-to-late 2020s. The exact timing will be determined by the markets and other factors as we strive to balance costs and benefits in the fairest way possible. This is a significant change that represents a fair solution to an issue that has unfairly burdened current electricity ratepayers. This does not sacrifice investments in the energy system. We're changing the way electricity costs are recovered, and~~

~~moving funding for social programs off of hydro bills. This plan is delivering the biggest rate reduction in Ontario's history.~~

Q. Who was involved in the policy and implementation process to meet the mandate?

Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.

The senior officials and staff were from:

- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

Commented [NC(8]: Add to KMs

In development and implementation of Global Adjustment (GA) refinancing, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

Auditor General and Financial Accountability Office reports

Q. The Auditor General and the Financial Accountability Office both suggest that the cost of borrowing will be more expensive than traditional government borrowing? Is this true?

In the development of Ontario's Fair Hydro Plan (OFHP), the government made the policy decision that deferred electricity system costs should be borne by the rate-base and not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible consumers.

Ontario Power Generation (OPG) was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro ~~Plan~~ Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner.

OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

With respect to the $4 billion[15] figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, it should be noted that the FAO's report was based on initial Ministry of Energy estimates

[15] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Commented [NC(9]: Will we know what the new $4 billion number will be on February 9?

Commented [AL10]: The Ministry doesn't have an equivalent number to the FAO's $4 billion and doesn't currently expect to calculate one. Numbers regarding the forecasted cost of the program (debt and interest) will continue to be updated.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[16]. The preliminary estimate from March 2017 was about $28 billion[17].

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[18] to approximately $20 billion[19]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manage (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 billion[20] to less than $19 billion[21].

Q. Has the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? I understand that the Office of the Audit General (OAG) has asked what are the factors that resulted in the changes in estimates from March 1 to August 31?

With respect to the $4 billion[22] figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt

---

[16] Ministry of Energy
[17] Ministry of Energy, submission to Financial Accountability Officer
[18] Ministry of Energy
[19] Ministry of Energy
[20] Ministry of Energy
[21] Ministry of Energy
[22] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

over the thirty year life of OFHP will be approximately $20 billion[23]. The preliminary estimate from March 2017 was about $28 billion[24].

The revised estimates are the result of a number of factors, including updated long-term cost projections for the electricity system and residential bills provided by the Independent Electricity System Operator (IESO).

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[25] to approximately $20 billion[26]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manage (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 billion[27] to less than $19 billion[28].

Commented [NC(11]: I'm a little unclear on the difference between interest cost and peak debt?

Commented [AL12]: Peak debt represents the peak of accumulated principle and interest, which is forecasted to occur in the later 2020s. These interest figures represent the forecasted total amount of interest that will be payable over the life of the program.

Q. In the development of Ontario's Fair Hydro Plan, did the government set up the financing structure intentionally to keep it off government books?

No. GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

GA refinancing operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. How do you respond to the Financial Accountability Office's (FAO) suggestion from May 2017 that using Ontario Power Generation as the borrowing agent will cost $4 billion more? Why not have the Province borrow for the OFHP?

The policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets. Therefore, it was a primary policy objective to

[23] Ministry of Energy
[24] Ministry of Energy, submission to Financial Accountability Officer
[25] Ministry of Energy
[26] Ministry of Energy

ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base.

We believe it is appropriate for ratepayers to pay for the financing of electricity assets. The rate-base has a different risk profile than the tax-base, which would be reflected in different interest costs. Having the rate-base pay is not a new policy, for example Hydro One has borrowed in the capital markets since the early 2000s[29].

The $4 billion figure was an estimate made by the Financial Accountability Office (FAO) based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[30]. The preliminary estimate from March 2017 was about $28 billion[31].

The FAO report itself concludes by saying “the FAO’s estimates are subject to many assumptions and uncertainties (…) Fiscal impact may differ significantly from the FAO’s estimates.”

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[32]to approximately $20 billion[33]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 billion[34] to less than $19 billion[35].

Q. Do you disagree with the FAO on financial costs?

With respect to the $4 billion[36] figure referenced by the Financial Accountability Office (FAO) in its May 2017, it should be noted that the FAO’s report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

---

[29] Ministry of Finance
[30] Ministry of Energy
[31] Ministry of Energy, submission to Financial Accountability Officer
[32] Ministry of Energy
[33] Ministry of Energy

[36] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province’s Fair Hydro Plan*

Total borrowing estimates over the thirty-year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[37]. The preliminary estimate from March 2017 was about $28 billion[38].

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[39] to approximately $20 billion[40]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The Ministry estimates of total interest cost also decreased from $25 billion[41] to less than $19 billion[42].

Reasoning for Accounting Approach

Q. How do you respond to the Auditor General’s claim that the government ignored warnings regarding a potential adverse audit opinion of Ontario’s public accounts?

The government’s financial statements are prepared in accordance with Public Sector Accounting Standards (PSAS), and will continue to follow these standards for the transactions resulting from Ontario’s Fair Hydro Plan (OFHP) in 2017-18 and in future years.

In regards to rate-regulated accounting, PSAS are silent on the use of regulated accounting:

- PSAS acknowledges that it does not provide guidance on all possible transactions and notes that it is necessary to refer to other sources of guidance that are consistent with the PSAS framework; and
- US GAAP, with the most developed guidance on rate-regulated accounting, is the appropriate guidance to reference.

---

[37] Ministry of Energy
[38] Ministry of Energy, submission to Financial Accountability Officer
[39] Ministry of Energy
[40] Ministry of Energy

Many entities in Canada, including OPG and Hydro One use rate-regulated accounting:

- The OAG can refer to the CPA Canada research study that was shared.
- Rate-regulated accounting is well understood in the electricity sector.
- The recognition of regulatory assets brings IESO in line with 6 other independent system operators in North America, including AESO, ISO New England, NYISO, MISO, PJM and ERCOT.

The IESO management, IESO's Audit Committee, IESO's Board of Directors, IESO's external auditor and the Office of the Provincial Controller all support the use of rate-regulated accounting by IESO.

In the development of OFHP, the government consulted with several third party advisors in the application of accounting standards. This is normal course of business governments take for complex transactions.

QA Document.pdf

From:	Huang, Jackson (MEDG/MRIS)
To:	Rehob, James (ENERGY)
Subject:	QA Document
Date:	February 2, 2018 2:03:03 PM
Attachments:	QA - OPG OFHP Debt FinancingTech Briefing - AH - 20180201 - MO-EPE-LSBv2.docx

Confidential and Solicitor & Client Privileged

FYI – this is where I landed. I've copied the 3 new questions in the QA document here (I think the other questions are from a previous version) and substantive edits are in yellow.

If you are okay with this approach, I will send to Alena – she wanted to review before sending to Ava.

Thanks,
Jackson

Q. How much was spent by OPG to complete this transaction? Will these costs be borne by ratepayers?

OPG was identified as the Financial Services Manager responsible for producing the financing plans and for the financing entity (i.e., Fair Hydro Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

Under the *Ontario Fair Hydro Plan Act, 2017* (the "Act") and associated regulations, OPG is permitted to charge fees as financial services manager, which are calculated based on OPG's performance in managing the debt obligations and allow OPG to recover costs incurred in relation to the establishment, management and administration of the financing entity and/or the investment asset.

In accordance with regulations made under the Act, financial services manager fees incurred on or before July 31, 2021 are recovered from IESO, and recorded in the IESO variance account to form part of the IESO's regulatory asset. In accordance with the structure of Ontario's Fair Hydro Plan, in future years these amounts will be recovered from ratepayers.

Ontario's Fair Hydro Plan is designed to fairly allocate costs across the generations of electricity ratepayers. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system.

Further questions on OPG costs should be directed to OPG.

Q. When will the next tranche of debt be sold?

OPG was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

OPG is expected to purchase the IESO's regulatory asset monthly, and to issue longer term debt in the capital markets on a periodic basis.

Q. There is an election in 17 weeks. Can the Ontario Fair Hydro Plan be undone? What will that mean for the refinancing of the GA and Ontario ratepayers?

Ontario's Fair Hydro Plan is a function of both legislation and finance, and its implementation is ongoing. GA Refinancing is implemented through ongoing financings that OPG, as the Financial Services Manager, takes to market.

The *Ontario Fair Hydro Plan Act, 2017* and associated regulations provide the legislative framework for the GA refinancing program and its policy goals, allowing certain electricity system costs to be fairly allocated across generations of electricity ratepayers. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system.

In accordance with the legislation and associated regulations, Ontario's Fair Hydro Plan has lowered electricity bills by 25 per cent on average across the province for residential customers. As many as half a million small businesses and farms are also benefitting. Increases will be held to the rate of inflation for four years.

Jackson Huang
Counsel
Ministries of Energy / Economic Development & Growth /
Research, Innovation & Science / Infrastructure / Accessibility
Legal Services Branch
56 Wellseley St. West, 18th Floor, Toronto, ON M7A 2E7
Tel: 416-325-8414
jackson.huang@ontario.ca

QA - OPG OFHP Debt FinancingTech Briefing - A_7.pdf

CONFIDENTIAL

Q&A: OPG OFHP Tech Briefing
Ministry of Energy
Key Messages/Questions and Answers
Date: January 25, 2018
Last Reviewed by: ESP

KEY MESSAGES:

- **Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history.**

- **OFHP has lowered electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. The plan includes the 8 per cent rebate introduced in January 2017 and builds on previously announced initiatives to deliver broad-based rate relief on all electricity bills. As many as half a million small businesses and farms are also benefitting from a reduction.**

- **Ontario Power Generation (OPG) has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than original estimates.**

- **Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[1]. The preliminary estimate from March 2017 was about $28 billion[2].**

- **OPG has developed solid investor relationships and has a large investor base in the structured finance space that ~~would be~~is the target market for financing Ontario's Fair Hydro Plan initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors[3], including major investors in the Canadian power and utility bonds market.**

- **Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.**

- **The senior officials and staff were from:**
  - **Ministry of Energy;**
  - **Ministry of Finance;**
  - **Treasury Board Secretariat;**
  - **Office of the Provincial Controller;**
  - **Cabinet Office;**

---

[1] Ministry of Energy
[2] Ministry of Energy, submission to Financial Accountability Officer
[3] Ontario Power Generation

Commented [NC(1]: This should be in KMs

Commented [NC(2]: This should be in KMs

- o Ontario Financing Authority (OFA);
- o Independent Electricity System Operator (IESO); and
- o Ontario Power Generation Inc. (OPG).

Commented [NC(3]: Add to KMs

- **~~Ontario Power Generation (OPG)~~OPG has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).**

- **OPG currently manages approximately $20 billion[4] in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts**

- **OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments.**

- **The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.**

[4] Ontario Financing Authority

Qs and As

Q. Why did the government introduce the Ontario Fair Hydro Plan?

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly $70 billion[5] has been invested in the electricity system, including more than $37[6] billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP lowered electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

In developing the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. What is Global Adjustment (GA)?

Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also recovers costs associated with running conservation programs in the province.

GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a reliable supply of electricity.

GA pays for the bulk of the recent investments in the electricity system. The majority of the province's electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that generating assets are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets.

[5] Ministry of Energy, *2017 Long-Term Energy Plan*
[6] Ministry of Energy, *2017 Long-Term Energy Plan*

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Q. Has the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? How much is the program expected to cost?

Ontario Power Generation (OPG) has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than original estimates.

Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[7]. The preliminary estimate from March 2017 was about $28 billion[8].

Commented [NC(4]: This should be in KMs

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty-year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[9] to approximately $20 billion[10]. These estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro Plan? Would it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?

Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).

OPG currently manages approximately $20 billion[11] in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.

OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

OPG has developed solid investor relationships and has a large investor base in the structured finance space that would be the target market for financing Ontario's Fair Hydro Plan initiative. For

[7] Ministry of Energy
[8] Ministry of Energy, submission to Financial Accountability Officer
[9] Ministry of Energy
[10] Ministry of Energy
[11] Ontario Financing Authority

example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors[12], including major investors in the Canadian power and utility bonds market.

Commented [NC(5]: This should be in KMs

In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than $2 billion[13] and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

Q. How much was spent by OPG to complete this transaction? Will these costs be borne by ratepayers?

Commented [HA(6]: Unfortunately have nothing that can speak to the first part of this question.

~~The government is dedicated to reducing electricity costs wherever possible, while maintaining reliability for all consumers.~~

~~With Ontario's Fair Hydro Plan and as a result of the government's prudent fiscal management, the Ontario government is delivering on its commitment to balance the budget this year, recognizing that balance provides the foundation for the long-term well-being and prosperity of Ontarians.~~

~~To relieve the current burden on ratepayers and share costs more fairly, a portion of the GA is being refinanced. Refinancing the Global Adjustment (GA) will provide significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built.~~

~~In the early years, it is intended that a portion of the costs covered by the GA will be refinanced to reduce pressure on today's electricity ratepayers. In later years, the cost of refinancing will be recovered from ratepayers.~~OPG was identified as the Financial Services Manager responsible for producing the financing plans and for the financing entity (i.e., Fair Hydro ~~Plan~~ Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

Commented [JH7]: Note correct name of financing entity

Under the *Ontario Fair Hydro Plan Act, 2017* (the "Act") and associated regulations, OPG is permitted to charge fees as financial services manager, which are calculated based on OPG's performance in managing the debt obligations and allow OPG to recover costs incurred in relation to the establishment, management and administration of the financing entity and/or the investment asset.

In accordance with regulations made under the Act, financial services manager fees incurred on or before July 31, 2021 are recovered from IESO, and recorded in the IESO variance account to form part of the IESO's regulatory asset. In accordance with the structure of Ontario's Fair Hydro Plan, in future years these amounts will be recovered from ratepayers.

Ontario's Fair Hydro Plan is designed to fairly allocate costs across the generations of electricity ratepayers. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system.

Further questions on OPG costs should be directed to OPG.

[12] Ontario Power Generation
[13] Ontario Power Generation

Q. Some say you are unfairly placing the burden of debt on future generations through things like Ontario's Fair Hydro Plan, how do you respond?

Future generations will be paying their fair share for a system they will be benefiting from in their lifetime. Not only will they benefit from a reliable electricity system, but also from cleaner air resulting from the elimination of coal-fired generation.

Ontario's Fair Hydro Plan (OFHP) acts much like taking out a new mortgage – providing much-needed relief now by spreading costs across the life of our assets. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Moving forward, Ontario's 2017 Long-Term Energy Plan (2017 LTEP) focuses on continuing to put downward pressure on electricity bills over the long term. Our robust electricity supply puts us in a good position to improve efficiency, increase transparency and enhance opportunities for innovation and competition to further reduce system costs. That is why Ontario's Fair Hydro Plan includes a commitment to improving sector efficiency and modernizing Ontario's electricity market, building on the collaboration of the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).

For example, IESO's Market Renewal initiative will result in a more efficient marketplace with competitive and transparent mechanisms that meet future system needs at the lowest cost. The initiative is expected to save up to $5.2 billion[14] over a 10-year period and forms a key component of Ontario's plan to ensure the affordability of electricity in the longer term.

Q. When will the next tranche of debt be sold?

OPG was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro ~~Plan~~ Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

OPG is expected to purchase the IESO's regulatory asset ~~deferral~~ monthly, and to issue longer term debt in the capital markets on a periodic basis.

~~The *Fair Hydro Act, 2017* enables the Independent Electricity System Operator (IESO) and Ontario Power Generation (OPG) to work together to spread out the costs of Ontario's clean energy investments over a longer period of time, which ensures that the costs of these investments are allocated fairly among current and future ratepayers. This will be accomplished through refinancing a portion of the Global Adjustment (GA), resulting in significant and immediate rate reductions.~~

~~Under the legislation, OPG has developed a financing plan, which sets out the funding obligations and amounts related to the financing of the deferred GA amounts. The Ontario Energy Board (OEB) will continue its role as regulator for the electricity sector. In particular, it will continue to set commodity~~

[14] Independent Electricity System Operator, *Assessment of the Benefits of Market Renewal (Brattle Group)*

~~rates for Regulated Price Plan (RPP) consumers, including cost reductions under the *Fair Hydro Act, 2017*. Debt and financing costs will be recovered through adjustments to consumer bills.~~

~~Borrowing is expected to be done in tranches, as set out in the Financing Plan developed by OPG.~~

Q. There is an election in 17 weeks. Can the Ontario Fair Hydro Plan be undone? What will that mean for the refinancing of the GA and Ontario ratepayers?

~~The~~ Ontario's Fair Hydro Plan is a function of both legislation and finance, ~~has been developed~~ and its implementation ~~has begun and~~ is ongoing. ~~The Fair Hydro Plan (~~GA Refinancing~~)~~ is implemented through ongoing financings that OPG, as the Financial Services Manager, takes to market. ~~Through the Ontario Fair Hydro Plan Act, 2017, each financing is final once the financing has been completed, and cannot be undone until fully repaid.~~ ~~cannot be undone~~.

The *Ontario Fair Hydro Plan Act, 2017* and associated regulations provide the legislative framework for the GA refinancing program and its policy goals, allowing certain electricity system costs to be ~~to~~ fairly allocated across generations of electricity ratepayers. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system.

In accordance with the legislation and associated regulations, Ontario's Fair Hydro Plan ~~is lowering rates~~has lowered electricity bills by 25 per cent on average across the province for ~~all~~ residential customers. As many as half a million small businesses and farms are also benefitting. Increases will be held to the rate of inflation for four years.

~~Under GA refinancing, initial analysis indicates that borrowing would occur for about 10 years. Initial analysis indicates that it is currently anticipated that loans will begin to be paid back in the mid-to-late 2020s. The exact timing will be determined by the markets and other factors as we strive to balance costs and benefits in the fairest way possible. This is a significant change that represents a fair solution to an issue that has unfairly burdened current electricity ratepayers. This does not sacrifice investments in the energy system. We're changing the way electricity costs are recovered, and moving funding for certain social programs off of hydro bills. This plan is delivering the biggest rate reduction in Ontario's history.~~

~~The Ontario Fair Hydro Plan cannot be undone.~~

~~Ontario's Fair Hydro Plan is lowering rates by 25 per cent on average across the province for all residential customers. As many as half a million small businesses and farms are also benefitting. Increases will be held to the rate of inflation for four years.~~

~~Under GA refinancing, initial analysis indicates that borrowing would occur for about 10 years. Initial analysis indicates that it is currently anticipated that loans will begin to be paid back in the mid-to-late 2020s. The exact timing will be determined by the markets and other factors as we strive to balance costs and benefits in the fairest way possible. This is a significant change that represents a fair solution to an issue that has unfairly burdened current electricity ratepayers. This does not sacrifice investments in the energy system. We're changing the way electricity costs are recovered, and moving funding for social programs off of hydro bills. This plan is delivering the biggest rate reduction in Ontario's history.~~

Q. Who was involved in the policy and implementation process to meet the mandate?

Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.

The senior officials and staff were from:
- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

Commented [NC(8]: Add to KMs

In development and implementation of Global Adjustment (GA) refinancing, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

<u>Auditor General and Financial Accountability Office reports</u>

Q. The Auditor General and the Financial Accountability Office both suggest that the cost of borrowing will be more expensive than traditional government borrowing? Is this true?

In the development of Ontario's Fair Hydro Plan (OFHP), the government made the policy decision that deferred electricity system costs should be borne by the rate-base and not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible consumers.

Ontario Power Generation (OPG) was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro ~~Plan~~ Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner.

OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

With respect to the $4 billion[15] figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Commented [NC(9]: Will we know what the new $4 billion number will be on February 9?

Commented [AL10]: The Ministry doesn't have an equivalent number to the FAO's $4 billion and doesn't currently expect to calculate one. Numbers regarding the forecasted cost of the program (debt and interest) will continue to be updated.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast

[15] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[16]. The preliminary estimate from March 2017 was about $28 billion[17].

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[18] to approximately $20 billion[19]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manage (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 billion[20] to less than $19 billion[21].

Q. Has the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? I understand that the Office of the Audit General (OAG) has asked what are the factors that resulted in the changes in estimates from March 1 to August 31?

With respect to the $4 billion[22] figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[23]. The preliminary estimate from March 2017 was about $28 billion[24].

[16] Ministry of Energy
[17] Ministry of Energy, submission to Financial Accountability Officer
[18] Ministry of Energy
[19] Ministry of Energy
[20] Ministry of Energy
[21] Ministry of Energy
[22] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*
[23] Ministry of Energy
[24] Ministry of Energy, submission to Financial Accountability Officer

The revised estimates are the result of a number of factors, including updated long-term cost projections for the electricity system and residential bills provided by the Independent Electricity System Operator (IESO).

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[25] to approximately $20 billion[26]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manage (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 billion[27] to less than $19 billion[28].

Commented [NC(11]: I'm a little unclear on the difference between interest cost and peak debt?

Commented [AL12]: Peak debt represents the peak of accumulated principle and interest, which is forecasted to occur in the later 2020s. These interest figures represent the forecasted total amount of interest that will be payable over the life of the program.

Q. In the development of Ontario's Fair Hydro Plan, did the government set up the financing structure intentionally to keep it off government books?

No. GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

GA refinancing operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. How do you respond to the Financial Accountability Office's (FAO) suggestion from May 2017 that using Ontario Power Generation as the borrowing agent will cost $4 billion more? Why not have the Province borrow for the OFHP?

The policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets. Therefore, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base.

We believe it is appropriate for ratepayers to pay for the financing of electricity assets. The rate-base has a different risk profile than the tax-base, which would be reflected in different interest costs.

---

[25] Ministry of Energy
[26] Ministry of Energy

Having the rate-base pay is not a new policy, for example Hydro One has borrowed in the capital markets since the early 2000s[29].

The $4 billion figure was an estimate made by the Financial Accountability Office (FAO) based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[30]. The preliminary estimate from March 2017 was about $28 billion[31].

The FAO report itself concludes by saying “the FAO’s estimates are subject to many assumptions and uncertainties (…) Fiscal impact may differ significantly from the FAO’s estimates.”

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[32]to approximately $20 billion[33]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 billion[34] to less than $19 billion[35].

Q. Do you disagree with the FAO on financial costs?

With respect to the $4 billion[36] figure referenced by the Financial Accountability Office (FAO) in its May 2017, it should be noted that the FAO’s report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty-year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak

[29] Ministry of Finance
[30] Ministry of Energy
[31] Ministry of Energy, submission to Financial Accountability Officer
[32] Ministry of Energy
[33] Ministry of Energy

[36] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province’s Fair Hydro Plan*

debt over the thirty year life of OFHP will be approximately $20 billion[37]. The preliminary estimate from March 2017 was about $28 billion[38].

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[39] to approximately $20 billion[40]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The Ministry estimates of total interest cost also decreased from $25 billion[41] to less than $19 billion[42].

Reasoning for Accounting Approach

Q. How do you respond to the Auditor General's claim that the government ignored warnings regarding a potential adverse audit opinion of Ontario's public accounts?

The government's financial statements are prepared in accordance with Public Sector Accounting Standards (PSAS), and will continue to follow these standards for the transactions resulting from Ontario's Fair Hydro Plan (OFHP) in 2017-18 and in future years.

In regards to rate-regulated accounting, PSAS are silent on the use of regulated accounting:

- PSAS acknowledges that it does not provide guidance on all possible transactions and notes that it is necessary to refer to other sources of guidance that are consistent with the PSAS framework; and
- US GAAP, with the most developed guidance on rate-regulated accounting, is the appropriate guidance to reference.

Many entities in Canada, including OPG and Hydro One use rate-regulated accounting:

- The OAG can refer to the CPA Canada research study that was shared.

---

[37] Ministry of Energy
[38] Ministry of Energy, submission to Financial Accountability Officer
[39] Ministry of Energy
[40] Ministry of Energy

- Rate-regulated accounting is well understood in the electricity sector.
- The recognition of regulatory assets brings IESO in line with 6 other independent system operators in North America, including AESO, ISO New England, NYISO, MISO, PJM and ERCOT.

The IESO management, IESO's Audit Committee, IESO's Board of Directors, IESO's external auditor and the Office of the Provincial Controller all support the use of rate-regulated accounting by IESO.

In the development of OFHP, the government consulted with several third party advisors in the application of accounting standards. This is normal course of business governments take for complex transactions.

QA.pdf

From: Cayley, Daniel (ENERGY)
To: Hume, Steen (ENERGY)
Cc: Christie, Tim (ENERGY); Cox, Hilary (ENERGY)
Subject: QA
Date: October 17, 2017 3:34:00 PM
Attachments: QA - AG debt-legislation_v0 2.docx

QA - AG debt-legislation_v0 2.pdf

Q&A Response

Q: What is the difference between how the Auditor General characterizes the debt and how Government characterizes the debt?

The Auditor General report expresses the principal and interest on debt separately over three time periods or phases (i.e., 2017-21, 2021-28 and 2028-45).

The ENERGY debt forecast combines both principal and interest associated with Ontario's Fair Hydro Plan and is characterised in terms of peak debt over the 30-year life of the plan. ENERGY has also provided the forecast of total interest expressed as total interest accrued over this period.

ENERGY uses the peak debt concept due to the nature of how the debt is accrued.

Under Global Adjustment (GA) refinancing, the debt starts at zero but builds through the inflationary cap period as well as subsequent years before reaching a peak in the late 2020s. At that point the debt begins to be repaid until it returns to zero at the end of the thirty year period. This is in contrast to a capital spending program (i.e., infrastructure spending), where the peak debt is realized at the initialization of the term, and declines to zero over time.

	Interest	***Peak debt***	***Saving if Province funded entire refinancing***
ENERGY 1-March estimate	25.1	27.7	n/a
ENERGY 30-August estimate	18.3	18.5	n/a
AG / FAO report*	21.0	26.2	4.0

Q. Why did the government need to introduce legislation to enact OFHP?

The Fair Hydro Act, 2017 was required to implement Ontario's Fair Hydro Plan (OFHP).

The legislation achieved the following:

- Enabled the setting of lower electricity rates for specified consumers leading to a deferral of a portion of clean energy costs;
- Provided a statutory right for the recovery of those costs from future specified consumers;
- Allowed for the sale of the right of recovery of future costs;
- Implemented enhanced existing and new electricity social programs; and
- Shifted funding for certain electricity social programs to the tax base.

In addition, the legislation provided the Minister with the authority to implement the policy intent of OFHP (i.e., intergenerational reallocation process through the determination of the fair allocation amounts).

Finally, the legislation sets out the overall framework for determining the fair allocation of clean energy costs over time, establishing Ontario Power Generation as the Financial Services Manager (FSM) and requires the FSM to develop Financing Plans to be submitted to the Minister of Energy.

RE_ Fact Sheet .pdf

From:	Yoo, Sarah (CAB)
To:	Barbaro, Rachel (ENERGY)
Cc:	McMichael, Rhonda (CAB); Evans, Karen (ENERGY); Lyon, Sam (ENERGY); Biggs, Megan (ENERGY)
Subject:	RE: Fact Sheet
Date:	October 17, 2017 9:24:13 AM
Attachments:	Fact Sheet - MOE - AG Special Report v6-EPE-ADM_630.docx

Thanks, Rachel.

Is the attached the same product people were referring to in the meeting yesterday? If so, confirming no distribution on Newsroom, and hand out @ tech briefing / use reactively instead.

Please confirm.

From: Barbaro, Rachel (ENERGY)
Sent: October-17-17 9:19 AM
To: Yoo, Sarah (CAB)
Cc: Evans, Karen (ENERGY); Lyon, Sam (ENERGY); Biggs, Megan (ENERGY)
Subject: Fact Sheet

Hi Sarah,

Just wanted to let you know new direction from our MO as of this am, no to the statement, and yes to a fact sheet which I have attached. Direction from our MO is that they will send this out electronically, no newsroom posting.

Just wanted to ensure no surprises at your end!

Thanks
Rachel

Rachel Barbaro
Manager, Strategic Communications
Ministry of Energy, Communications Branch
416 212 4634

Fact Sheet - MOE - AG Special Report v6-EPE-A.pdf

Ontario

FACT SHEET

Ministry of Energy

Auditor General's Special Report on the Ontario Fair Hydro Plan

October 17, 2017

The special report from the Office of the Auditor General (OAG) focuses on the financial and accounting framework of Ontario's Fair Hydro Plan (OFHP), which is delivering the single largest reduction in electricity rates in the province's history by lowering electricity bills by an average of 25% for residential consumers, and holding increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting.

Refinancing the Global Adjustment (GA)

- To relieve the current burden on ratepayers and share costs more fairly, OFHP is refinancing a portion of the GA, which recovers costs associated with recent investments in the electricity system.

- Refinancing the GA provides significant and immediate rate relief by spreading the cost of electricity system investments over the expected useful life of the generation assets that have been built.

- In developing the policy to refinance the GA, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

- The GA refinancing design effectively achieves the goals of the refinancing program and ensures that the deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

Ontario's Fair Hydro Plan Accounting

- The government's financial statements are prepared in accordance with Public Sector Accounting Standards (PSAS), and will continue to follow these standards for the transactions resulting from Ontario's Fair Hydro Plan (OFHP) in 2017-18 and in future years.

- In the development of GA refinancing, the government and its agencies consulted with several third party advisors (e.g., KPMG, EY, Deloitte) in the application of accounting standards. This is normal course of business governments take for complex transactions.

- The Independent Electricity System Operator (IESO) will reflect the impact of the GA refinancing using rate-regulated accounting:

    - Rate-regulated accounting better reflects the economic substance of IESO's operations and enhances the relevance, transparency and accountability of its financial reporting;

    - Rate-regulated accounting is well understood in the electricity sector. Other Canadian electricity entities use rate-regulated accounting – Ontario Power Generation, Toronto Hydro, Fortis Inc.; and

  - The recognition of regulatory assets brings IESO in line with 6 other independent system operators in North America – AESO (Alberta), ISO New England, NYISO (New York), MISO (Midwest United States), PJM (Eastern United States) and ERCOT (Texas).

- PSAS is silent on the use of regulated accounting:

  - PSAS acknowledges that it does not provide guidance on all possible transactions and notes that it is necessary to refer to other sources of guidance that are consistent with the PSAS framework; and

  - The IESO consulted US GAAP, which has the most developed guidance on rate-regulated accounting, is the appropriate guidance to reference in this scenario.

- KPMG issued a clean opinion in the audit of IESO's December 31, 2016 financial statements that included recognition of rate-regulated assets and market accounts.

- Deloitte was also consulted and confirmed that an entity reporting under PSAS could have regulatory assets if rate-regulated. The IESO is rate-regulated by the Ontario Energy Board (OEB) in accordance with the Electricity Act and the Ontario Energy Board Act.

Ontario Power Generation as Financial Services Manager

- Ontario Power Generation (OPG) has been identified as the Financial Services Manager (FSM) to develop the financing plans and act as the financing entity (i.e., Fair Hydro Plan Trust) responsible for managing the debt obligations associated with GA refinancing.

- OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

- OPG currently manages approximately $20 billion in nuclear funds and as an entity regulated by the Ontario Energy Board (OEB), OPG has extensive experience with regulatory deferral and variance accounts.

- OPG has also developed solid investor relationships and has a large investor base in the structured finance space who would be the target market for financing Ontario's Fair Hydro Plan (OFHP) initiative.

  - For example, the Lower Mattagami project financing attracted a broad investor base of about 80 institutional investors, including major investors in the Canadian power and utility bonds market.

- Further, the structure of the OFHP incents OPG, in its role as FSM, to keep the cost of borrowing to a minimum by basing a portion of its management fees on its ability to achieve lower than forecast interest rates.

- OPG is currently in preliminary discussions with rating agencies and plans to be in the market in November 2017.

Financial Accountability Office's Report on the Costs of the Ontario's Fair Hydro Plan

- The Financial Accountability Office's (FAO) report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

- Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since FAO released its report in May 2017. The borrowing costs are now forecast to be substantially lower than original estimates.

- Current government estimates forecast that the peak debt over the thirty year life of OFHP will be below $20 billion. The preliminary estimate from March 2017 was about $28 billion.

- The FAO report concludes by saying “the FAO’s estimates are subject to many assumptions and uncertainties … Fiscal impact may differ significantly from the FAO’s estimates.”

- OPG is now beginning the process of raising funds to finance these deferred costs, and while total borrowing costs will not be known until the transaction is complete, accumulated interest is projected to be considerably less than the estimates in the report of the FAO.

- The government will also continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program. Further details will be released in the 2017 Long-Term Energy Plan (2017 LTEP), which will be released on October 26, 2017.

RE_ QA Document(1).pdf

From:	Huang, Jackson (MEDG/MRIS)
To:	Thouin, Alena (ENERGY)
Cc:	Rehob, James (ENERGY)
Subject:	RE: QA Document
Date:	February 5, 2018 10:59:11 AM
Attachments:	QA - OPG OFHP Debt FinancingTech Briefing - AH - 20180201 - MO-EPE-LSBv2....docx

Hi Alena,

Sorry - Ava just followed up about this document. The clients is asked to send this up by noon today.

Please let us know if you have any questions with the attached.

Thanks,
Jackson
For James and Jackson

From: Huang, Jackson (MEDG/MRIS)
Sent: February-02-18 6:21 PM
To: Thouin, Alena (ENERGY)
Cc: Rehob, James (ENERGY)
Subject: FW: QA Document

Hi Alena,

Sorry for the delay – please see attached our comments (highlighted in green) to the QA document for OFHP for your consideration.

We did not have much comments – the main comments are:

1. The way FSM fees are described (see "Q. How much was spent by OPG to complete this transaction? Will these costs be borne by ratepayers?")
2. The period during which IESO funds carrying costs (see "Q. How much was spent by OPG to complete this transaction? Will these costs be borne by ratepayers?")
3. Reference to IESO deferral vs regulatory asset (see "Q. When will the next tranche of debt be sold?")

Note that our comments that the clients have accepted (in the question regarding the election and undoing the FHP) are not highlighted.

Happy to discuss if you have any questions.

Thanks,
Jackson
For James and Jackson

QA - OPG OFHP Debt FinancingTech Briefing - A_8.pdf

Q&A: OPG OFHP Tech Briefing
Ministry of Energy
Key Messages/Questions and Answers
Date: January 25, 2018
Last Reviewed by: ESP

KEY MESSAGES:

- **Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history.**
- **OFHP has lowered electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. The plan includes the 8 per cent rebate introduced in January 2017 and builds on previously announced initiatives to deliver broad-based rate relief on all electricity bills. As many as half a million small businesses and farms are also benefitting from a reduction.**
- **Ontario Power Generation (OPG) has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than original estimates.**
- **Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[1]. The preliminary estimate from March 2017 was about $28 billion[2].**
- **OPG has developed solid investor relationships and has a large investor base in the structured finance space that ~~would be~~is the target market for financing Ontario's Fair Hydro Plan initiative. For example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors[3], including major investors in the Canadian power and utility bonds market.**
- **Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.**
- **The senior officials and staff were from:**
    - **Ministry of Energy;**
    - **Ministry of Finance;**
    - **Treasury Board Secretariat;**
    - **Office of the Provincial Controller;**
    - **Cabinet Office;**

Commented [NC(1)]: This should be in KMs

Commented [NC(2)]: This should be in KMs

---

[1] Ministry of Energy
[2] Ministry of Energy, submission to Financial Accountability Officer
[3] Ontario Power Generation

- o **Ontario Financing Authority (OFA);**
- o **Independent Electricity System Operator (IESO); and**
- o **Ontario Power Generation Inc. (OPG).**

Commented [NC(3]: Add to KMs

- **~~Ontario Power Generation (OPG)~~OPG has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).**

- **OPG currently manages approximately $20 billion[4] in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts**

- **OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments.**

- **The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.**

[4] Ontario Financing Authority

Qs and As

Q. Why did the government introduce the Ontario Fair Hydro Plan?

The government has been making important investments in a cleaner and more reliable electricity system, but these investments have led to higher bills. Since 2003, nearly $70 billion[5] has been invested in the electricity system, including more than $37[6] billion in electricity generation to ensure the system is clean and reliable.

Ontario's Fair Hydro Plan (OFHP) is delivering the single-largest reduction in electricity rates in the province's history. OFHP lowered electricity bills by 25 per cent on average for residential consumers and will hold increases to the rate of inflation for four years. As many as half a million small businesses and farms are also benefitting from a reduction.

In developing the policy to refinance the Global Adjustment (GA), the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

OFHP operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. What is Global Adjustment (GA)?

Global Adjustment (GA) is a mechanism that recovers certain electricity system costs, such as capital costs incurred by generators. GA is calculated by the Independent Electricity System Operator (IESO) based on the difference between the market price for electricity, which represents the marginal cost of electricity production, and rates paid to regulated and contracted generators to ensure they can recover their fixed costs. It also recovers costs associated with running conservation programs in the province.

GA has been an important factor in providing stable prices while ensuring that sufficient generating capacity is in place to deliver a reliable supply of electricity.

GA pays for the bulk of the recent investments in the electricity system. The majority of the province's electricity generators operate under 20-year contracts. Third-party experts have confirmed that many of these generators will be able to continue to operate beyond the end of their contract. This means that generating assets are expected to have ongoing useful life and benefit future ratepayers by reducing the need to finance the development of new generating assets.

[5] Ministry of Energy, *2017 Long-Term Energy Plan*
[6] Ministry of Energy, *2017 Long-Term Energy Plan*

Refinancing the GA is providing significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Q. Has the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? How much is the program expected to cost?

Ontario Power Generation (OPG) has begun the process of raising funds to finance the deferred costs, and while total borrowing costs will not be known until the program is complete, accumulated interest is projected to be considerably less than original estimates.

Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[7]. The preliminary estimate from March 2017 was about $28 billion[8].

Commented [NC(4]: This should be in KMs

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty-year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[9] to approximately $20 billion[10]. These estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

Q. Why is the government using Ontario Power Generation (OPG) as a borrowing agent for Ontario's Fair Hydro Plan? Would it be easier to use a traditional government borrowing agent like the Ontario Financing Authority (OFA)?

Ontario Power Generation (OPG) has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA).

OPG currently manages approximately $20 billion[11] in segregated nuclear funds to manage nuclear liabilities, and, is an electricity sector entity regulated by the Ontario Energy Board (OEB) with extensive experience with regulatory deferral and variance accounts.

OPG also has the breadth and demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. These financing initiatives have been well received by investors at a reasonable cost to OPG. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

OPG has developed solid investor relationships and has a large investor base in the structured finance space that would be the target market for financing Ontario's Fair Hydro Plan initiative. For

---

[7] Ministry of Energy
[8] Ministry of Energy, submission to Financial Accountability Officer
[9] Ministry of Energy
[10] Ministry of Energy
[11] Ontario Financing Authority

example, Lower Mattagami project financing attracted a broad investor base of ~80 institutional investors[12], including major investors in the Canadian power and utility bonds market.

In terms of administration, OPG is currently managing its own Corporate public debt program and three project financing programs totalling more than $2 billion[13] and two commercial paper programs.

Finally, OPG's Treasury functions are well positioned given their management of existing multiple debt programs.

Q. How much was spent by OPG to complete this transaction? Will these costs be borne by ratepayers?

~~The government is dedicated to reducing electricity costs wherever possible, while maintaining reliability for all consumers.~~

~~With Ontario's Fair Hydro Plan and as a result of the government's prudent fiscal management, the Ontario government is delivering on its commitment to balance the budget this year, recognizing that balance provides the foundation for the long-term well-being and prosperity of Ontarians.~~

~~To relieve the current burden on ratepayers and share costs more fairly, a portion of the GA is being refinanced. Refinancing the Global Adjustment (GA) will provide significant and immediate rate relief by spreading the cost of electricity investments over the expected lifecycle of the infrastructure that has been built.~~

~~In the early years, it is intended that a portion of the costs covered by the GA will be refinanced to reduce pressure on today's electricity ratepayers. In later years, the cost of refinancing will be recovered from ratepayers.~~OPG was identified as the Financial Services Manager responsible for producing the financing plans and for the financing entity (i.e., Fair Hydro ~~Plan~~ Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

Under the *Ontario Fair Hydro Plan Act, 2017* (the "Act") and associated regulations, OPG is permitted to charge fees as financial services manager, which are calculated based on OPG's performance in managing the debt obligations and allow OPG to recover costs incurred in relation to the establishment, management and administration of the financing entity and/or the investment asset.

In accordance with regulations made under the Act, financial services manager fees incurred on or before July 31, 2021 are recovered from IESO, and recorded in the IESO variance account to form part of the IESO's regulatory asset. In accordance with the structure of Ontario's Fair Hydro Plan, in future years these amounts will be recovered from ratepayers.

Ontario's Fair Hydro Plan is designed to fairly allocate costs across the generations of electricity ratepayers. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system.

Further questions on OPG costs should be directed to OPG.

[12] Ontario Power Generation
[13] Ontario Power Generation

Commented [NC(5]: This should be in KMs

Commented [HA(6]: Unfortunately have nothing that can speak to the first part of this question.

Commented [JH7]: Note correct name of financing entity

Q. Some say you are unfairly placing the burden of debt on future generations through things like Ontario's Fair Hydro Plan, how do you respond?

Future generations will be paying their fair share for a system they will be benefiting from in their lifetime. Not only will they benefit from a reliable electricity system, but also from cleaner air resulting from the elimination of coal-fired generation.

Ontario's Fair Hydro Plan (OFHP) acts much like taking out a new mortgage – providing much-needed relief now by spreading costs across the life of our assets. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system. This more fairly shares the cost of our investments across the generations of electricity ratepayers who will benefit from them.

Moving forward, Ontario's 2017 Long-Term Energy Plan (2017 LTEP) focuses on continuing to put downward pressure on electricity bills over the long term. Our robust electricity supply puts us in a good position to improve efficiency, increase transparency and enhance opportunities for innovation and competition to further reduce system costs. That is why Ontario's Fair Hydro Plan includes a commitment to improving sector efficiency and modernizing Ontario's electricity market, building on the collaboration of the Independent Electricity System Operator (IESO) and the Ontario Energy Board (OEB).

For example, IESO's Market Renewal initiative will result in a more efficient marketplace with competitive and transparent mechanisms that meet future system needs at the lowest cost. The initiative is expected to save up to $5.2 billion[14] over a 10-year period and forms a key component of Ontario's plan to ensure the affordability of electricity in the longer term.

Q. When will the next tranche of debt be sold?

OPG was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro ~~Plan~~ Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the GA and will ensure that it is done in an efficient and cost-effective manner.

OPG is expected to purchase the IESO's regulatory asset ~~deferral~~ monthly, and to issue longer term debt in the capital markets on a periodic basis.

~~The *Fair Hydro Act, 2017* enables the Independent Electricity System Operator (IESO) and Ontario Power Generation (OPG) to work together to spread out the costs of Ontario's clean energy investments over a longer period of time, which ensures that the costs of these investments are allocated fairly among current and future ratepayers. This will be accomplished through refinancing a portion of the Global Adjustment (GA), resulting in significant and immediate rate reductions.~~

~~Under the legislation, OPG has developed a financing plan, which sets out the funding obligations and amounts related to the financing of the deferred GA amounts. The Ontario Energy Board (OEB) will continue its role as regulator for the electricity sector. In particular, it will continue to set commodity~~

[14] Independent Electricity System Operator, *Assessment of the Benefits of Market Renewal (Brattle Group)*

~~rates for Regulated Price Plan (RPP) consumers, including cost reductions under the *Fair Hydro Act, 2017*. Debt and financing costs will be recovered through adjustments to consumer bills.~~

~~Borrowing is expected to be done in tranches, as set out in the Financing Plan developed by OPG.~~

Q. There is an election in 17 weeks. Can the Ontario Fair Hydro Plan be undone? What will that mean for the refinancing of the GA and Ontario ratepayers?

~~The~~ Ontario's Fair Hydro Plan is a function of both legislation and finance, ~~has been developed~~ and its implementation ~~has begun and~~ is ongoing. ~~The Fair Hydro Plan (~~GA Refinancing~~)~~ is implemented through ongoing financings that OPG, as the Financial Services Manager, takes to market. ~~Through the Ontario Fair Hydro Plan Act, 2017, each financing is final once the financing has been completed, and cannot be undone until fully repaid.~~ ~~cannot be undone~~.

The *Ontario Fair Hydro Plan Act, 2017* and associated regulations provide the legislative framework for the GA refinancing program and its policy goals, allowing certain electricity system costs to be ~~to~~ fairly allocated across generations of electricity ratepayers. Current ratepayers are paying less now, and future ratepayers will in turn help to pay for their fair share of the significant investments that we've made to build a clean and reliable electricity system.

In accordance with the legislation and associated regulations, Ontario's Fair Hydro Plan ~~is lowering rates~~has lowered electricity bills by 25 per cent on average across the province for ~~all~~ residential customers. As many as half a million small businesses and farms are also benefitting. Increases will be held to the rate of inflation for four years.

~~Under GA refinancing, initial analysis indicates that borrowing would occur for about 10 years. Initial analysis indicates that it is currently anticipated that loans will begin to be paid back in the mid-to-late 2020s. The exact timing will be determined by the markets and other factors as we strive to balance costs and benefits in the fairest way possible. This is a significant change that represents a fair solution to an issue that has unfairly burdened current electricity ratepayers. This does not sacrifice investments in the energy system. We're changing the way electricity costs are recovered, and moving funding for certain social programs off of hydro bills. This plan is delivering the biggest rate reduction in Ontario's history.~~

~~The Ontario Fair Hydro Plan cannot be undone.~~

~~Ontario's Fair Hydro Plan is lowering rates by 25 per cent on average across the province for all residential customers. As many as half a million small businesses and farms are also benefitting. Increases will be held to the rate of inflation for four years.~~

~~Under GA refinancing, initial analysis indicates that borrowing would occur for about 10 years. Initial analysis indicates that it is currently anticipated that loans will begin to be paid back in the mid-to-late 2020s. The exact timing will be determined by the markets and other factors as we strive to balance costs and benefits in the fairest way possible. This is a significant change that represents a fair solution to an issue that has unfairly burdened current electricity ratepayers. This does not sacrifice investments in the energy system. We're changing the way electricity costs are recovered, and moving funding for social programs off of hydro bills. This plan is delivering the biggest rate reduction in Ontario's history.~~

Q. Who was involved in the policy and implementation process to meet the mandate?

Senior officials and staff from several departments and agencies, led by the Ministry of Energy, collaborated to plan a structure, identify risks, make decisions and take other actions to meet the mandate.

The senior officials and staff were from:
- Ministry of Energy;
- Ministry of Finance;
- Treasury Board Secretariat;
- Office of the Provincial Controller;
- Cabinet Office;
- Ontario Financing Authority (OFA);
- Independent Electricity System Operator (IESO); and
- Ontario Power Generation Inc. (OPG).

Commented [NC(8]: Add to KMs

In development and implementation of Global Adjustment (GA) refinancing, the government considered a range of implementation options and consulted with legal, accounting, financial and energy sector third-party experts to provide advice and ensure due diligence was completed.

Auditor General and Financial Accountability Office reports

Q. The Auditor General and the Financial Accountability Office both suggest that the cost of borrowing will be more expensive than traditional government borrowing? Is this true?

In the development of Ontario's Fair Hydro Plan (OFHP), the government made the policy decision that deferred electricity system costs should be borne by the rate-base and not the tax-base.

Based on this policy decision, it was decided that the debt obligation would be recognized as a regulatory asset that would be sold and securitized. This design appropriately aligns the costs and benefits within the group of eligible consumers.

Ontario Power Generation (OPG) was identified as the Financial Services Manager responsible for the financing plans and the financing entity (i.e., Fair Hydro ~~Plan~~ Trust) that will manage the debt obligations. OPG has the necessary financing and commercial expertise to assist with refinancing the Global Adjustment (GA) and will ensure that it is done in an efficient and cost-effective manner.

OPG has a demonstrated track record in the financial markets with its Corporate Debt platform, private placement of insurance linked bonds, participation in securitization programs and highly successful project debt issuances tied to new hydroelectric developments. The innovative, cost saving and precedent setting aspects of these structures have resulted in international recognition.

With respect to the $4 billion[15] figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Commented [NC(9]: Will we know what the new $4 billion number will be on February 9?

Commented [AL10]: The Ministry doesn't have an equivalent number to the FAO's $4 billion and doesn't currently expect to calculate one. Numbers regarding the forecasted cost of the program (debt and interest) will continue to be updated.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast

[15] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[16]. The preliminary estimate from March 2017 was about $28 billion[17].

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $~~ ~~28 billion[18] to approximately $20 billion[19]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manage (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 billion[20] to less than $19 billion[21].

Q. Has the Ministry of Energy's estimate for "peak debt" related to Ontario's Fair Hydro Plan (OFHP) changed? I understand that the Office of the Audit General (OAG) has asked what are the factors that resulted in the changes in estimates from March 1 to August 31?

With respect to the $4 billion[22] figure referenced by the Financial Accountability Office (FAO) in its May 2017 report, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[23]. The preliminary estimate from March 2017 was about $28 billion[24].

[16] Ministry of Energy
[17] Ministry of Energy, submission to Financial Accountability Officer
[18] Ministry of Energy
[19] Ministry of Energy
[20] Ministry of Energy
[21] Ministry of Energy
[22] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*
[23] Ministry of Energy
[24] Ministry of Energy, submission to Financial Accountability Officer

The revised estimates are the result of a number of factors, including updated long-term cost projections for the electricity system and residential bills provided by the Independent Electricity System Operator (IESO).

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[25] to approximately $20 billion[26]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manage (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 billion[27] to less than $19 billion[28].

Commented [NC(11]: I'm a little unclear on the difference between interest cost and peak debt?

Commented [AL12]: Peak debt represents the peak of accumulated principle and interest, which is forecasted to occur in the later 2020s. These interest figures represent the forecasted total amount of interest that will be payable over the life of the program.

Q. In the development of Ontario's Fair Hydro Plan, did the government set up the financing structure intentionally to keep it off government books?

No. GA refinancing is designed so that deferred costs are borne by the rate-base, as the beneficiaries of the electricity system, and not the tax-base.

GA refinancing operates under a financial and accounting framework that is appropriate for the intended purpose and in accordance with Public Sector Accounting Standards (PSAS) and ensures that the fairness goals underlying the program are achieved in a cost-effective manner.

Q. How do you respond to the Financial Accountability Office's (FAO) suggestion from May 2017 that using Ontario Power Generation as the borrowing agent will cost $4 billion more? Why not have the Province borrow for the OFHP?

The policy objective of OFHP is to more fairly allocate the cost to ratepayers over the useful life, not the contractual term, of the electricity generating assets. Therefore, it was a primary policy objective to ensure that the costs are borne by the beneficiaries of the electricity system – the rate-base – not the tax-base.

We believe it is appropriate for ratepayers to pay for the financing of electricity assets. The rate-base has a different risk profile than the tax-base, which would be reflected in different interest costs.

[25] Ministry of Energy
[26] Ministry of Energy

Having the rate-base pay is not a new policy, for example Hydro One has borrowed in the capital markets since the early 2000s[29].

The $4 billion figure was an estimate made by the Financial Accountability Office (FAO) based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak debt over the thirty year life of OFHP will be approximately $20 billion[30]. The preliminary estimate from March 2017 was about $28 billion[31].

The FAO report itself concludes by saying "the FAO's estimates are subject to many assumptions and uncertainties (…) Fiscal impact may differ significantly from the FAO's estimates."

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[32]to approximately $20 billion[33]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The government estimates of total interest cost also decreased from $25 billion[34] to less than $19 billion[35].

Q. Do you disagree with the FAO on financial costs?

With respect to the $4 billion[36] figure referenced by the Financial Accountability Office (FAO) in its May 2017, it should be noted that the FAO's report was based on initial Ministry of Energy estimates from March 2017. Subsequent analysis conducted by the Ministry of Energy refined a number of variables, including the cost of borrowing and electricity system cost forecasts.

Total borrowing estimates over the thirty-year life of OFHP have been revised down substantially by the government since the FAO released its report in May 2017, and borrowing costs are now forecast to be substantially lower than original estimates. Current government estimates forecast that the peak

[29] Ministry of Finance
[30] Ministry of Energy
[31] Ministry of Energy, submission to Financial Accountability Officer
[32] Ministry of Energy
[33] Ministry of Energy

[36] Financial Accountability Officer, *An Assessment of the Fiscal Impact of the Province's Fair Hydro Plan*

debt over the thirty year life of OFHP will be approximately $20 billion[37]. The preliminary estimate from March 2017 was about $28 billion[38].

A number of variables, including interest rates, electricity demand and electricity costs, will vary over the thirty year life of OFHP and cost estimates will continue to be revised to reflect these changing conditions.

The government will continue to identify and implement initiatives to take costs out of the electricity system, which would reduce the cost of the GA refinancing program.

If pressed on the details of the revised peak debt number:

Peak debt for OFHP has been revised down substantially from March 2017, from about $28 billion[39] to approximately $20 billion[40]. The higher March 2017 estimate was used by the FAO in its May 2017 report.

Updated estimates are consistent with 2017 Long-Term Energy Plan (LTEP) projections, include fees charged by OPG in its role as financial service manager (FSM) and assume a 5 per cent interest rate.

If pressed on interest costs:

The Ministry estimates of total interest cost also decreased from $25 billion[41] to less than $19 billion[42].

Reasoning for Accounting Approach

Q. How do you respond to the Auditor General's claim that the government ignored warnings regarding a potential adverse audit opinion of Ontario's public accounts?

The government's financial statements are prepared in accordance with Public Sector Accounting Standards (PSAS), and will continue to follow these standards for the transactions resulting from Ontario's Fair Hydro Plan (OFHP) in 2017-18 and in future years.

In regards to rate-regulated accounting, PSAS are silent on the use of regulated accounting:

- PSAS acknowledges that it does not provide guidance on all possible transactions and notes that it is necessary to refer to other sources of guidance that are consistent with the PSAS framework; and
- US GAAP, with the most developed guidance on rate-regulated accounting, is the appropriate guidance to reference.

Many entities in Canada, including OPG and Hydro One use rate-regulated accounting:

- The OAG can refer to the CPA Canada research study that was shared.

---

[37] Ministry of Energy
[38] Ministry of Energy, submission to Financial Accountability Officer
[39] Ministry of Energy
[40] Ministry of Energy

- Rate-regulated accounting is well understood in the electricity sector.
- The recognition of regulatory assets brings IESO in line with 6 other independent system operators in North America, including AESO, ISO New England, NYISO, MISO, PJM and ERCOT.

The IESO management, IESO's Audit Committee, IESO's Board of Directors, IESO's external auditor and the Office of the Provincial Controller all support the use of rate-regulated accounting by IESO.

In the development of OFHP, the government consulted with several third party advisors in the application of accounting standards. This is normal course of business governments take for complex transactions.

RE_ QA Document.pdf

From:	Lightbody, Ava (ENERGY)
To:	Huang, Jackson (MEDG/MRIS)
Cc:	Rehob, James (ENERGY)
Subject:	RE: QA Document
Date:	February 5, 2018 11:58:25 AM

Thanks!

From: Huang, Jackson (MEDG/MRIS)
Sent: February-05-18 11:21 AM
To: Lightbody, Ava (ENERGY)
Cc: Rehob, James (ENERGY)
Subject: Fw: QA Document

Hi Ava,

Please see attached our consolidated comments on the QA document. Alena is okay with our comments.

Thanks,
Jackson
For James and Jackson

From: Huang, Jackson (MEDG/MRIS) <Jackson.Huang@ontario.ca>
Sent: Friday, February 2, 2018 6:20 PM
To: Thouin, Alena (ENERGY)
Cc: Rehob, James (ENERGY)
Subject: FW: QA Document

Hi Alena,

Sorry for the delay – please see attached our comments (highlighted in green) to the QA document for OFHP for your consideration.

We did not have much comments – the main comments are:

1. The way FSM fees are described (see "Q. How much was spent by OPG to complete this transaction? Will these costs be borne by ratepayers?")
2. The period during which IESO funds carrying costs (see "Q. How much was spent by OPG to complete this transaction? Will these costs be borne by ratepayers?")
3. Reference to IESO deferral vs regulatory asset (see "Q. When will the next tranche of debt be sold?")

Note that our comments that the clients have accepted (in the question regarding the election and undoing the FHP) are not highlighted.

Happy to discuss if you have any questions.

Thanks,
Jackson
For James and Jackson

Rate Mitigation Implementation Materials.pdf

From:	Schlaepfer, Martin (ENERGY)
To:	Teliszewsky, Andrew (ENERGY)
Cc:	Imbrogno, Serge (ENERGY); Whittington, Matt (ENERGY); Baker, Carys (ENERGY)
Subject:	Rate Mitigation Implementation Materials
Date:	November 22, 2017 7:10:47 PM
Attachments:	Agenda_Weekly Rate Mitig Implmentation Group_ Nov 22.docx Technical Briefing Fair Hydro Plan OPG Financing Plan Nov 22.pptx 2017 OFHP Matrix and Outstanding Business Issues - Week of Nov 20 DOCX _.docx

Hi Andrew,

Attached are the materials for tomorrow's rate mitigation implementation meeting, including a draft technical presentation from OPG.

Thanks,
Martin

Martin Schlaepfer
Director of Operations
Deputy Minister's Office
Ministry of Energy
T: 416-326-7688
M: 647-980-4634
E: martin.schlaepfer@ontario.ca

Agenda_Weekly Rate Mitig Implmentation Group_.pdf

WEEKLY RATE MITIGATION IMPLEMENTATION GROUP
November 23, 2017

Agenda

1) GA Refinancing
    - o General Business Update (OPG / IESO / ENERGY)
    - o Provincial Support Agreement (OFA / OPG / ENERGY)
    - o OPG's Financing Plan / Market Activities (OPG)

2) Technical Briefing (All)

3) Other OFHP Initiatives
    - o RRRP, OESP and FN (SNAP)
    - o Affordability Fund (CRED)

Notes:

Technical Briefing Fair Hydro Plan OPG Financ.pdf

Fair Hydro Plan
OPG's Role and Financing Plan
Technical Briefing

December, 2017

Confidential and Commercially Sensitive

DRAFT

ONTARIO POWER GENERATION

Role of Ontario Power Generation (OPG) in Global Adjustment Refinancing

- **The *Ontario Fair Hydro Plan Act, 2017*, identifies OPG as the Financial Services Manager (FSM) to develop the financing plans and manage the financing entity (i.e. Fair Hydro Plan Trust) responsible for managing the debt obligations associated with GA refinancing.**
    - OPG has extensive experience and expertise in the Ontario energy market, capital markets, regulation and fund management and will ensure that the refinancing will be done in the most efficient and cost-effective manner.
    - In addition to executing hundreds of millions in project financing over the past several years, OPG completed its first bond offering in the Canadian public market with $500 million unsecured 10-year bonds in October 2017.
    - OPG has established the Trust.

- OPG currently manages approximately $20 billion in nuclear funds through the Decommissioning Segregated Fund and the Used Fuel Segregated Fund, and $15 billion in pension funds.

- OPG has also developed solid investor relationships and has a large investor base in the structured finance space [NTD: insert target market] for financing Ontario's Fair Hydro Plan (OFHP) initiative. For example, the Lower Mattagami project financing attracted a broad investor base of about 80 institutional investors, including major investors in the Canadian power and utility bonds market.

OPG Recent Financing Activities

- On September 12, 2017, OPG filed a $2 billion short form shelf prospectus to facilitate corporate borrowing through a medium term note program over the next two years. The net proceeds from borrowing under this prospectus will be used for general corporate purposes and the financing of OPG's subordinated debt investment in the Fair Hydro Plan
- In October, OPG issued $500 million of senior notes payable under the Medium Term Note Program. The notes have a coupon interest rate of 3.32 percent and an effective rate of 3.43 percent, payable semi-annually with a maturity date of October 4, 2027
- Notes issued exceeded the original OPG target of $300 million because of the strong reception from investors.

Fair Hydro Trust Financing

- On November 22, OPG's Board of Directors approved OPG's plan for participation in the Fair Hydro Plan, and to act as the Financial Services Manager.
  - OPG has established a holding company FHP 2017 Inc. which will own and control the Trust.
- To date, $1 billion in Global Adjustment payments have been deferred under the Fair Hydro Plan and held by the Independent Electricity System Operator (IESO).
- The Fair Hydro Trust purchased this asset in December. The initial $1 billion in investment assets purchased by the Trust was financed as follows:
  - Borrowing by the Trust through senior debt from capital markets $510 million (51%)
  - Equity injection by the Province $440 million (44%) invested as subordinated debt in the Trust
  - OPG subordinated debt in the Trust $50 million (5%) already raised through the initial borrowing
- In subsequent months the Trust will make a decision on the purchase of subsequently generated assets (approximately $200 million per month) and any required financing.
- A second round of borrowing will take place in Q1 - 2018 to continue managing the refinancing of the Global Adjustment.
- [NTD: Placeholder about success/level of interest in the offering]

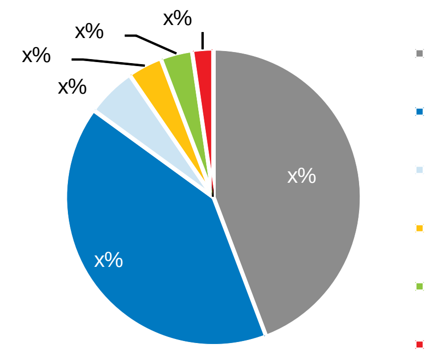
Debt Offering Summary

TERMS SUMMARY

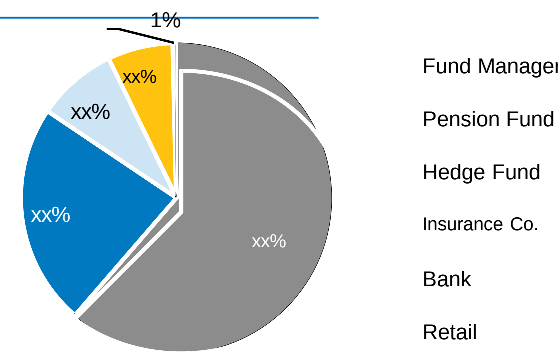
Issuer	Fair Hydro Trust .
Pricing Date	xx-Dec 17
Settlement Date	xx-Dec-17
Ratings (DBRS/Moodys)	xxx
Amount	$xxx million
Coupon	x.xx%
Coupon Dates	xxx and xxx
Maturity Date	x-xxx-xx
Spread vs. Benchmark	+xx bps (credit: +xx bps, curve: +xx bps)
GoC Curve	GoC x.xx% due xx, xxxx GoC x.xx% due xx, xxxx
GoC Benchmark	GoC x.xx% due xx, xxxx
Benchmark Price/ Yield	$xx.xx / x.xx%
Price	$xxxx
Yield	x.xxx%
Syndicate	xxxx

1. Co-Lead Agent & Bookrunner.

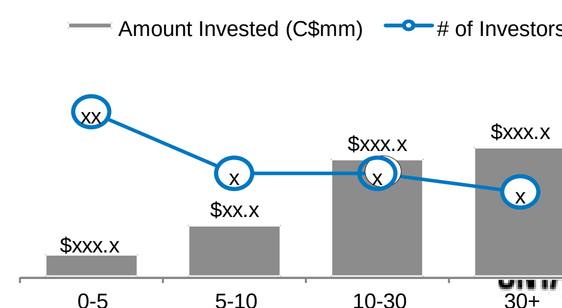
INVESTOR LOCATION



INVESTOR TYPE



ALLOCATION HISTOGRAM[1]



Reporting

- Through OPG's ownership and control over the key activities of the Trust, OPG will consolidate the financial results of the Trust in accordance with US GAAP.
- OPG will report the financial results of the Trust's operations in its annual report and 4th Quarter financial results. These results will be released by OPG in early March 2018.
- The Trust's activities will be reported as a separate segment in OPG's overall results as follows:
  - Regulated – Nuclear Generation
  - Regulated - Hydroelectric
  - Contracted Generation Portfolio
  - Regulated - Nuclear Waste Management
  - Services, Trading, and Other Generation
  - Fair Hydro Trust
- The Trust's financial results will also be reported directly to the Province as OPG's shareholder.

2017 OFHP Matrix and Outstanding Business Iss.pdf

Implementation of Ontario's Fair Hydro Plan
Week of November 20, 2017

Global Adjustment (GA) Refinancing – Business Issues / Implementation

Issue	Overview	Supporting Documentation	Timing / Next Steps
Provincial Support Agreements	• Province to provide contingent supports to enable structure	• Term Sheet • Change of Law Protection Agreement • Change of Law Process Agreement	• MOF / OPG / ENE to finalize Protection Agreement and Process Agreement based on Term Sheet approved by TB/CAB **Timing / Next Steps:** • Briefing of the ENERGY, MOF and TBS Ministers • Agreements to be finalized in late November or early December
OPG's Financing Plan / Market Activity	• OPG, as Financial Services Manager (FSM), to provide a Financing Plan in accordance with legislation, to evaluate the incurrence of funding obligations consistent with the FAA	• Minister's FAA letter to OPG	• OPG has provided a draft of the Financing Plan to ENERGY **Timing / Next Steps:** • OPG Board committee review and approval by the OPG Board (TBD) • OPG initial debt issuance is currently planned to proceed in December (TBD)
Equity Injection	• Province to purchase shares of OPG on a monthly basis	• Master Subscription Agreement • /MOU between OFA and Energy • Notice of Subscription • Amendment to Articles	• OPG to request Minister's signature on the Shareholder resolution. • OPG/ENE to sign Master Share Subscription Agreement • OFA / ENE to finalize monthly process and sign-off mechanism **Timing / Next Steps:** • Agreements to be signed by end of November

Issue	Overview	Supporting Documentation	Timing / Next Steps
Subordinated Debt Loan Agreement	• OPG will lend the equity injection from the Province to the Trust by way of subordinated debt	• Draft Term Sheet • Debt Loan Arrangement	• OFA to provide comments • OPG to draft Debt Loan Arrangement **Timing / Next Steps**: • Fall (TBD) • OPG to provide additional details
PILs Exemption	• The beneficiary of the OFHP Trust would be subject to tax under the payments in lieu of taxes (PILs) regime under the *Electricity Act, 1998* (EA), and would pay PILs to the Ontario Electricity Financial Corporation (OEFC) • Province to mitigate cost to ratepayers by minimizing PILs payable by the Trust beneficiary • A regulation under the EA is required to exempt the beneficiary from PILs • OPG has advised that a comfort letter signed by the Minister is required	• Comfort Letter • Tax Regulation	• MOF is working to complete comfort letter to OPG and to finalize the regulation **Timing / Nexts Steps:** • Regulation expected to proceed to LRC in December 2017 (TBD)
OPG / IESO Commercial Agreement	• OPG and IESO to enter in to commercial agreements governing the Financing Entity purchase of the regulatory assets (i.e., the Master Transfer and Servicing Agreement, Security Agreement and Acknowledgement and Indemnity Agreement)		• OPG and IESO working to finalize Agreement **Timing / Next Steps:** • The draft commercial agreements to be reviewed by IESO Board on November 22 • Further changes may be required pending the completion of the rating process

Ontario's Fair Hydro Plan – Implementation Matrix of Other Items

Item	Key Deliverables / Considerations	Timing / Next Steps
1) Broadening Rural or Remote Rate Protection (RRRP) (SNAP)		
• ENERGY, LSB and LDCs	Recent Action Items • All LDCs have indicated they have implemented the program • IESO has begun to submit reimbursement claims to the Ministry	• Discussions have begun with OEB over content of cost forecast report, as contemplated in Regulation
2) Expanding Ontario Electricity Support Program (OESP) (SNAP)		
• ENERGY, LSB, MCSS and OEB	Recent Action Items • July 26 TB/MB approval for MCSS to expand FTEs and create team dedicated to OESP enrolment, using funds approved on March 1, 2017 under FHP. Sought 50 FTEs, but only received 20 – MCSS is considering report-back in the fall to ask for more FTEs • OEB and MCSS completed data exchange to identify SA clients currently not enrolled in OESP. Outreach calls began late August, with direct mail-outs in late September. New call centre to be ready to receive calls in October, and MCSS to continue developing software solution for automation over next several months • CRA approval of proposal for e-signatures on OESP applications. OEB is working with service provider to upgrade online application process (November), and CRA will formally accept e-signature process by amending MOU with Ministry of Finance • Ministry is targeting November/December to proclaim OEBA amendments to shift OESP to tax base, along with supporting regulatory amendments • Ministry and OEB have initiated work to transfer OESP to government	• LRC package being developed for proclaiming OEBA provisions and amending OESP regulation; scheduled for December 11 • Continue to work with OEB to build up the Ministry's knowledge base on administering the OESP

Item	Key Deliverables / Considerations	Timing / Next Steps
3) Providing a First Nations On-Reserve Delivery Credit (SNAP)		
• ENERGY and LSB	Recent Action Items • All LDCs have indicated they have implemented the program. • FNDC post card has been distributed to First Nations Band Councils • IESO has begun submitting claims for reimbursement to the Ministry	• Receiving regular updates from H1 on enrollment
4) Establishing an Affordability Fund (CRED)		
• ENERGY, IGS, LSB, Blakes, CSD, OPCD, TBS, MOF and H1 (KPMG and Osler)	Recent Action Items • October 12 – Soft launch of microsite and 1-800 number • October 24 – Formal announcement in Hamilton involving the Minister of Energy • As of Oct. 23 – 66 applications from 6 LDCs processed through the AFT program • On Oct. 24 – the Trustees held a webinar with 200 participants to overview program design, walk-through the web site, and answer distributor questions • Next Trustees meetings are scheduled for November 30 and December 14, 2017 • The Trust expects to enter into agreements with interested electricity distributors starting mid to late December 2017 (Hydro One will deliver the program in service areas of those distributors who do not apply)	**Fall 2017:** • The Trustees are considering the use of Ontario 211 services for the Affordability Fund • The Fund will have an iterative design process to support continuous improvement, and will revisit design elements every 6 months and measures every 3 months • ENERGY has amended the TPA with the Affordability Fund Trust to require use of the Ontario logo in Fund marketing and communications and is waiting for the Trustees to sign • Report back to TB/MBC through the PRRT process with final program details and a performance management framework including outcome measures and targets **Early 2018:** • ENERGY can apply for additional funds through an in-

Item	Key Deliverables / Considerations	Timing / Next Steps
		year TB submission based on performance and need. Trust term can be extended with amended/new TPA if agreed by Trust
5) Bill Presentment (SNAP/LSB)		
• ENERGY	Recent Action Items • Ongoing Ministry work re bill presentment	• 2017-2018 – Bill redesign
6) Expanding ICI (ESP/COMs)		
• ENERGY, LSB, IESO and LDCs	Recent Action Items • Ongoing OCC outreach campaign to promote ICI • Ministry review OCC proposal to expand ICI outreach program • Ongoing outreach with LDCs being undertaken by IESO • CME proposal (TBD)	• Quarterly Report Backs re ICI to TBS / MBC
7) Energy Sector Efficiencies (i.e., Ontario Energy Board and IESO) (SNAP / ESP)		
• ENERGY, LSB, OEB and IESO	**OEB:** • Directive / Letter (TBD) Considerations • Signal efficiencies intent in OEB business plan letter • Work with OEB/LDCs on LTEP document and proposed directive to OEB • Mandate Review implementation is an opportunity to reiterate expectations **IESO:** • Directive / Letter (TBD) Considerations • IESO's stakeholder engagement re Market Renewal is ongoing	• Continue this work as part of 2017 LTEP implementation